1982 ANNUAL REPORT

Wyoming Game and Fish Department

THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

Game and Fish Department

CHEYENNE, WYOMING 82002

W. DONALD DEXTER
DIRECTOR

August 26, 1982

Honorable Ed Herschler
Governor, State of Wyoming
Capitol Building
Cheyenne, Wyoming 82002

Dear Governor Herschler:

In accordance with Section 23-1-503 of the Wyoming Statutes, it is my pleasure to submit to you the Annual Report on Wyoming Game and Fish Department activities for fiscal year 1982. This report was prepared by Department personnel at the direction of the Commission and covers the period July 1, 1981 through June 30, 1982.

The Report contains a resume' of official transactions, audit reports and status of Wyoming's wildlife. It is intended to assist you personally in evaluating Wyoming's wildlife programs and the Commission's administration of them.

We hope the Report will be used as an interesting, informative document to aid legislators, sportsmen, community leaders and general citizens who wish to use it for any analysis of our efforts in the protection and management of Wyoming's priceless and incomparable wildlife resources.

Respectfully submitted,

John Anselmi

John Anselmi, President
Wyoming Game and Fish Commission

JA:ag

1 9 8 2 A N N U A L R E P O R T

WYOMING GAME AND FISH DEPARTMENT

THE COMMISSION....

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Jean Harriet, Buffalo
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and Sheridan Counties

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Represents Teton, Sublette,
Lincoln and Uinta Counties

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INTRODUCTION AND DIVISION REPORTS

This report covers the progress and financial status of the Wyoming Game and Fish Department during fiscal year 1982. The information documents progress toward objectives as presented in our Strategic Plan for the Comprehensive Management of Wildlife in Wyoming, 1978-1983.

During F.Y. 1982, a total of 4,895,953 hunting and fishing recreation days were provided to the public. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc. Hunters and fishermen expended approximately $193,380,762 in pursuit of their sport throughout the state. The Department received revenues totaling $16,613,631.83 of which $12,152,723.35 was from the sale of hunting and fishing licenses and tag fees. Expenditures totaled $16,001,294.46.

The Department continues to experience the rapid changes, additional pressures on wildlife and unique wildlife management problems generated by exhaustive mineral and energy development across the state. Our rapidly increasing resident human population continues to be a very important influence on the future of Wyoming's wild resources, their management and use.

At the end of the period covered by this report, the Department was comprised of 315 permanent full-time employees and 82 temporary or seasonal workers. As our responsibilities, jurisdiction, and general workload grows, so must our personnel force if we are to continue those programs and services demanded of us.

The 1979 Wyoming Legislature enacted a new license fee schedule which went into effect January 1, 1980. New laws mandating the expenditure of these new revenues and inflation will be accommodated and the Department can expect financial solvency until approximately 1985.

A summary of Department activities by respective Division follows:

COMMUNICATIONS DIVISION
DICK KEENEY, CHIEF

INFORMATION SECTION - The Communications Division's Information Section activities are divided into the following main categories:

A. News Releases - Releases are sent to 950 recipients. A total of 133 news releases were printed for fiscal year 1982. These releases have been used by newspapers, radio, television,

and many are printed via the Associated Press and United Press International wires. We work closely with outdoor writers and many of our releases are used by them in the national outdoor sports magazines. A special release was made to outdoor writers and proved very successful in selling leftover deer and antelope licenses. Due to the 3 to 4 month lead time, this was very difficult. However, our information was received and used by media to include all hunting/shooting related magazines. A special article "Leftover Antelope" appeared in the AMERICAN HUNTER MAGAZINE. This according to License Section and our mail and phone calls was extremely successful in selling left-over and additional licenses.

B. Radio - We produce three weekly radio programs; one a three-minute "Wyoming Outdoorsman" and a ten-minute "Game and Fish Report" and a 30-second spot "Outdoor Tips." These are sent to and used by 22 of the states' radio stations. We appear as a guest or arrange for other Department personnel to appear as a guest on radio programs. These are often the "call in variety" and we have had excellent response. We tape a weekly program with John Case of WBBM Radio, Chicago. This is a CBS affiliate station and is syndicated in 47 states.

C. Television - Our efforts to inform and educate the public via TV have been extremely successful the past year. In fiscal year 1982, 37 30-second spots were produced and mailed to stations in Wyoming and surrounding states. These spots were aired as Public Service Announcements, which mean they are of each station's choosing. Many of the stations are airing the spots on their four daily newscasts. Monetarily, such air time is worth an average of $160 per 30-second spot. Considering that the 15 stations gave us approximately 210 minutes of air time per week, the Department received about $68,000 worth of free publicity per week, or $275,000 per month. During the calendar year 1982, the Department received about $3.5 million worth of free Game and Fish publicity. The stations now running our PSA's are: KTWO, Casper; KCWY, Casper; KYCU, Cheyenne; KTNW, Riverton; Sweetwater Television Corp., Rock Springs; KMGH, Denver; KWGN, Englewood; KID, Idaho Falls; KIFI, Idaho Falls; KTVQ, Billings; KSTF, Scottsbluff; KOTA, Rapid City; KSL, Salt Lake City; KTVX, Salt Lake City; and KUTV, Salt Lake City.

Accomplishments in this category are the direct result of funding through a budget enhancement project.

D. Television - The IAFWA (International Association of Fish and Wildlife Agencies) is supporting Glen Lau's two new television series. The "Sports Afield" television magazine and the "Coors

Western Outdoorsman" are both on the air in this area. Both have used footage from this Department for their programs. So far this has been an excellent series.

A special on "Sports Afield" this year featured the Wyoming Game and Fish Department. It ran first in the spring of 1982 and will rerun the fall of 1983. The Section Manager is now serving as chairman of the IAFWA Television Subcommittee in coordinating the national media efforts with Glen Lau Productions.

E. Gaffer - Six Gaffers (an in-house publication) are printed yearly. We still need more input from the field. We appreciate all the support that has been received this past year.

F. Information - This section is charged with the responsibility of responding to application requests from nonresidents and residents. The bulk are nonresidents who are sent the big game packets. A new mailing system utilizing a computer has replaced the old hand sorting and hand mailing. The system works well and has saved the Department a great deal of money. The section is also charged with preparing the following for printing: Outfitters List; Springer Regulations and Applications; Sandhill Crane Applications; Sportsmans Clubs; and all Pocket Summaries.

G. Public Contact - Members of the section speak to sportsmen's clubs, churches and service clubs. This is an important function not only as it benefits these organizations, but also increases public understanding of the Department's efforts and goals.

H. Orientations - Two personnel orientations were participated in by this section. We attempt to prepare new employees for the contacts they will be making with the press. This includes their use, benefit and hazards.

I. Correspondence - Many hundreds of letters are received that require special attention. Some of these are from outdoor writers and these especially must be handled with care as what is written will be rewritten and appear in print for hundreds of thousands to read.

J. Special Projects - Many projects of other Divisions and Sections require the talents of this section. These include slide shows, multi-media slide shows, special tapes, video tapes and films to record a particular happening.

PHOTO LAB - The photographic technician handled approximately 6,600 items of photographic material in fiscal year 1982. A breakdown of this number included:

Developing 196 rolls of black and white film
Printing 1,436 black and white prints for Game and Fish reports; special publications; internal publications; the "Wyoming Wildlife" magazine; personnel service awards; contact sheets; general work orders, etc.
1,510 prints were made to accompany Department news releases.
125 black and white prints were made for use as court evidence.
1,036 prints and 328 slides were made and sent out to external publications and individuals for reproduction and personnel use.
The volume of copy work included converting 556 transparencies to black and white, and 184 charts, prints and art work to slides.
1,052 duplicates were ordered from original transparencies.
Dry mounting of photographs and certificates, matting and framing amounted to about 208.
Copy work activity has increased four-fold over the previous year and the total number of black and white prints made has increased about 50 percent.

MOTION PICTURE - The newest Department motion picture production OUTDOOR COURTESY has been completed. This film will be available to the public on a free-loan or rent-free basis. It is 16mm, color-sound, and has a running time of 15 minutes. The picture addresses the sometimes unethical behavior of many people who enjoy the outdoors, but who may forget to follow the rules. Some of these rules are written into law, while others are simply understood by most, and fall under the category of good manners or common sense. A variety of these examples are shown. They involve not only hunters and fishermen, but also campers, hikers, boaters and others. This film is recommended for audiences of all ages, and especially for those interested in a quality outdoor experience.

EDUCATION - The Education Section continued to conduct classes in schools, for youth organizations and for the public. Most programs include wildlife management, Wyoming history and Furbearers-Trapping, Department functions, wildlife conservation and career topics. Current issues and problems in the wildlife field are a part of most programs, or the major topic for many.

The 19th Girls and 20th Boys annual youth wildlife conservation camps at Sybille were conducted in June. The Education Manager and Sheridan Communications Field Representative also participated in the state 4-H camp in Fremont County.

Three elementary school outdoor education camps were also conducted at the Sybille Conservation Camp facility. Seventy-five students and thirteen teachers participated in these camps.

Prohibitive replacement costs and excessive maintenance costs resulted in phasing out the Wildlife Education Unit, purchased in 1969. This unit, a 27-foot motorhome with wildlife displays completed twelve years of service. Future emphasis will be placed upon classroom and field programs and workshops for teachers.

Plans are being made to form a State Committee for "Project Wild" and to develop a state implementation plan. Project Wild, a K-12 wildlife activities project, is being tested and final writing phases and printing should start in 1983. This project should be ready for printing for the 1983-84 school year. Workshops for teachers will be a necessary part of the implementation plan.

Education personnel participated in four Natural Resource Management teacher workshops, conducting sessions in wildlife management and Department functions and responsibilities.

The Section Manager participated in two Western Regional Environmental Education Council meetings and the Western Association of Hunter Safety Coordinators meeting hosted in Jackson, Wyoming.

The Education Specialist attended three Governors Traffic Safety conference meetings.

Two "new employee" orientation courses were coordinated by the Education Specialist. Twenty-five new personnel attended these twelve-hour orientation presentations. The program was reviewed by the Department of Administration and Fiscal Control and was given a good rating.

The Education Manager continued liaison with the state 4-H committee and plans have been formed to introduce the "Acres for Wildlife" program for 4-H projects on a statewide basis. Original projects will enroll at least one acre for wildlife as a base project. Habitat improvement for fish and wildlife, with Department supervision, will provide advanced work projects.

Numerous meetings were attended within the Department and with other agencies and with teachers.

The Education Manager attended seminars in business management and 16 mm projector maintenance. The Education Specialist attended a seminar on personnel training.

Extensive revision of the Cheyenne office motion picture library was under taken. Outdated titles and damaged prints were deleted from the library.

The section also has responsibility of the microfiche library and handling requests for motion pictures and scheduling the same for public use.

Considerable time was spent by the Education and Hunter Safety secretaries and the Education Specialist in handling increased requests by telephone for information on hunting seasons, license applications and hunting areas.

The Section Manager and Education Specialists taught several hunter safety classes. The Education Manager attended two hunter safety instructor workshops and assisted the Cheyenne Rifle and Pistol Club with Sight-In Days and construction of a new firing range.

HUNTER SAFETY - The following is a list of Hunter Safety activities undertaken and/or accomplished in the past fiscal year:

1. Nine new instructor workshops were held, adding a gain of approximately 100 new instructors.

2. Bowhunter Instructor Certification Workshop was held in cooperation with Bowhunters of Wyoming and the International Bowhunters Education Foundation. Twenty new Bowhunter Instructors are now teaching a 6-hour voluntary Bowhunter Education Program. The Bowhunters of Wyoming have assumed major responsibility for funding and presenting this program. The Game and Fish will function as a record keeping partner in this endeavor.

3. The new Hunter Safety Instructor manual has been written and covers such topics as policy and procedures, public speaking, learning theory, teaching methods, lesson planning and use of visual aids.

4. Through cooperative efforts with several school districts and teachers throughout the state, Hunter Safety is now offered in 16 public schools.

5. Wyoming hosted the Western Association of Hunter Education Coordinators (W.A.H.E.C.) annual meeting in Jackson, Wyoming. The theme being "Special Programs for the Handicapped." Contact has been made with several agencies in Wyoming as well as throughout the United States to compile information on the feasibility of a program in Wyoming.

6. Hunter Safety was represented in five summer camps as follows:

   2 Sybille Conservation Camps - 1 boys, 1 girls
   1 Henderson Camp
   1 Alta Vista Camp
   1 Mallo Camp - near Newcastle for all Campbell County 5th and 6th graders

7. A statewide Hunter Safety Course Profile Survey has been instituted to determine the course coverage, films used, fee charged, etc.

8. Approximately 700 instructors certified 7,500 students.

9. With the assistance of License Section/Data Entry approximately 30,000 student records and 600 instructor records were input in the new Hunter Safety computer system.

10. The Hunter Safety Secretary was trained in the use of ALTER program. The Hunter Safety Instructors Manual has been input on this system. Plans are to put the Hunter Safety Firearms Checkout list, the student final exam, and the instructor exam on the ALTER Program.

WYOMING WILDLIFE - Wyoming Wildlife was published monthly, including our special photo contest issue, pictorial edition, fishing and hunting issues in February, April, May and August, respectively.

Wyoming Wildlife's total subscriptions continue to run about 44,500. With newsstand sales, the magazine is reaching about 46,500 families throughout the U.S.

During the year we implemented a tighter scheduling program for magazine articles, and we maintain more than a year's monthly files for upcoming publication. In this manner we are better able to plan ahead for copy and photos in future issues of the magazine, authors are better informed as to when their work will be published, and we trust it will lead to more involvement by field personnel in Wyoming Wildlife.

SPECIAL PUBLICATIONS - This section handles all Department printing, both commercial and central duplicating, except Wyoming Wildlife magazine. Job specification writing, printing contracts and central duplicating requests are all handled by the Special Publications Section.

Designing and layout of all the Department's major publications are handled by the section.

Inventory, sales and distribution of all Department saleable publications with the exception of Wyoming Wildlife is handled by Special Publications.

This section is responsible for the printing but not the distribution of all hunting, fishing and boating regulations.

FIELD REPRESENTATIVE - Routine and ongoing work included weekly radio programs, regular news releases to area media and replies to mail and telephone inquiries at the Sheridan District Office.

Special emphasis was given to the Department's need for additional funding. This topic was woven into all programs and presentations given.

Training others to use "the process approach" to environmental education continued. I led a team of facilitators again this year at a workshop at

the University of Wyoming. Also, a float was constructed for the Sheridan Centennial.

A summary of other activities follows:

YOUTH	
Camps -	8
School Programs -	48
Other Youth Programs -	3
ADULT	
Service Clubs -	5
Adult Programs -	15
Radio Talk Shows -	13
Public Hearings -	4
HUNTER SAFETY	
Instructor Workshop -	1
Classes Taught-(179 persons ctfd)	6
Classes Assisted -	2

FISCAL DIVISION
GLENN A. SHAFFER, CHIEF FISCAL OFFICER

The Fiscal Division continued as a service and staff function and rendered assistance to other Department divisions and to the public. Primary functions continued to be proper collection, expenditure and accounting for revenues and associated assets.

Beginning operating balance F.Y.82, $4,837,210. Operating receipts were $16,613,632, an increase of $180,186 or 1.1% over F.Y.81.

Expenditures were $15,746,871, which includes encumbrances and was an increase of 3.5% from F.Y.81. These activities resulted in the ending operating balance of $5,703,971. This is an increase of $1,068,434 over F.Y.81. As welcome as the increase is, it was achieved by reducing the expenditure percentage from 12.75 to 6 percent when compared to F.Y.81, and an addition to the income picture of $325,652 from a dedicated fund which was terminated and transferred to operating funds. This is a one-time transfer and those funds will not reoccur in the future. In addition, the apparent increase to the operating balance is impacted by the expenditure of $549,952 for Landowner Coupons which is disclosed as a dedicated account expense on this statement as compared to F.Y.81 where it is shown in operating expenses. As welcome as the increased ending operating balance is, expenditure projections indicate that future ending operating balances could begin to show sharp declines as inflation continues and generated revenues remain relatively constant. Anticipated increased sales of antelope licenses may provide short-term relief next year, F.Y.83, but

this issue remains unresolved at this writing.

The inflation of past years and increasing payouts to landowners for Landowner Coupons continued to pressure expenditures of F.Y.82 as in the previous year. Payouts for Landowner Coupons increased in F.Y.82 by $100,000 which was equivalent to over 22,000 coupons and an increase of 22% over F.Y.81 leading to the largest amount ever paid in one fiscal year according to past records. High interest rates have favored the Department with somewhat higher interest revenue but this trend will tend to reverse if interest rates decline.

The Landowner Coupon Automation Payment System allowed processing of over 22,000 more coupons this year with the completion of this task approximately sixty days earlier than last year without the additional temporary personnel needed in the past. This program was a success and cost effective, as it was estimated that it paid for its cost with reduced work force, time and paperwork. It also reduced the future need of additional personnel.

Postal and freight increases not totally anticipated were projected to cost the Department an additional $34,000 above approved budget. These increases occurred after budget compilation and as such, new bulk mailing procedures were established. Although costs were still incurred, the measures taken kept the cost to only $14,000 over budget which was a significant difference over the projection. These procedures remain in effect.

The accomplishments of the division over the past year are many and our goal to achieve our primary responsibilities and pursue all possible alternatives in reducing unnecessary expenses will certainly produce more accomplishments.

FISH DIVISION
JOE WHITE, CHIEF

The Fish Division was originally created for the protection, conservation, restoration and management of fisheries resources in the state of Wyoming. This designation has now been expanded to include organisms that are primarily aquatic or cold-blooded in nature. These include fish, amphibians, reptiles, mollusks and crustaceans.

Routine environmental and protection activities continue to be a significant Fish Division effort. Changes in federal administration attitudes have been reflected in environmental impact statements and federal land management agency proposals requiring even more detailed scrutiny and comment.

A great deal of time and money have been devoted to environmental surveillance and providing comment and information regarding rapid energy development in the southwestern part of the state. The Riley Ridge Development near Big Piney and the Overthrust Development near Evanston are the two areas of primary concern. Much effort was devoted to activity associated with beginning construction of Cheyenne Water Project Stage II.

Hog Park and Rob Roy reservoirs were pulled down for construction of a new dam. Chemical rehabilitation of fish populations is expected in 1983. Stream flow guarantees in the Encampment River have still not been determined.

The tightening of the federal budget has affected the Fish Division on several projects. Instream flow investigations in cooperation with the Bureau of Land Management have been concluded due to federal budget cuts. Data collection and techniques should benefit the Department if an instream flow bill passes and in providing recommendations for the Water Development Commission projects. The instream flow crew was reassigned on July 1, 1982 to work on 16 Water Development Commission projects currently under consideration. Funding for the crew will come from the water development fund. The first phase of the Clean Lakes project was completed and priority for lake restoration was identified. Federal funding cuts, however, have abolished the Clean Lakes program.

Because of loss of the federal finance portion of the reservoir research (Commercial Fish Program) the unit was reduced to a single permanent biologist with seasonal assistance. The loss of manpower necessitated some reduction of work in several areas; however, definitive estimates of fish stock were calculated for Diamond Lake. Progress was made on the development of the Reservoir Quality Index and the crew was instrumental in obtaining much needed fishery data for Flaming Gorge Reservoir kokanee salmon populations. Even with the reduction of funds, stream habitat work progressed in several areas; projects on the Salt Creek, Tosi and Tepee creeks all in cooperation with the USFS, Huff Creek in cooperation with the Bureau of Land Management, the North Fork of the Tongue River, U.S. Forest Service, the Salt River habitat program with the SCS, Governor's Office, and Conservation Commission. Work on the Habitat Quality Index continued to be an important crew responsibility and a procedure manual is being printed.

Mark Fowden, who was with Commercial Fish, was transferred to the Fish Population-Bio Stat Unit to increase gathering detailed information on stream fish populations. Big Horn, Green, Wind, Laramie and Little Laramie rivers were areas of major emphasis. Several advancements in analysis techniques have been made which aid more effective analysis of data gathered by management crews. The special study on Ocean Lake entered its final year. Also, during the year Limnological Laboratory personnel were able to overcome significant analytic problems related to analysis of total phosphates using the new analytical equipment. Solution of data readout problems amounted to a major breakthrough and results in time saving in the future.

Fish Division continued to search for forage fish and species of fish to exert a biological control. Spottail shiners were obtained from South Dakota and introduced into Boysen Reservoir to produce better forage for the walleye. The forage fish program on Seminoe Reservoir is apparently having an effect and improving the fisheries.

Lake trout eggs were traded for northern pike from Minnesota to restock Keyhole. Hopefully these fish will bolster the pike population and aid in controlling the dense carp population. Increased water levels during the spring and summer of 1983 produced an excellent gizzard shad crop plus the best year class of spottail shiners on record.

The project on management of bass on farm ponds continued. Primary emphasis was on identifying forage organisms to enhance bass growth rates in Wyoming. Work with tiger muskies and flathead catfish has also been undertaken as a means of reducing and eliminating undesirable fish species prior to bass introduction.

Completion reports were prepared for our DJ projects on Jackson Lake and the Snake River. Emphasis on the Snake River will now focus on the improvement of spawning habitat in tributary spring creeks. This was found to be the main limiting factor in limiting the trout abundance in the river proper.

Ocean Lake is continually responding to the walleye stocking program with more fisherman use and better catch rates than over the past ten years. Fishing on Seminoe Reservoir was excellent in 1982. Trout harvest rates were the highest since the early 60's and walleye fishing received increased interest due to new liberal creel limits and better condition of the fish. Fisherman use increased dramatically. Shoreline access to Seminoe continued to be a major problem due to the checkerboard pattern of ownership. There have been several closures on previously used access through private land. Studies continued on the Big Horn River in the Thermopolis area on Buffalo Bill Reservoir and on the Laramie Plains lakes.

A new program utilizing slot limits was initiated in 1982 on six miles of the Green River and on the North Platte River above Saratoga. A slot limit regulation with artificial lure restrictions hopefully will increase the size of the fish in both areas. Public response has seemed highly favorable to date.

A recent creel census last year on Glendo Reservoir showed that trout were not entering the creel in satisfactory numbers to justify the stocking. Future management of the reservoir will probably emphasize walleye, yellow perch and channel catfish.

Fish production increased in the hatchery system to 546,000 pounds. There was continuing interest in the utilization of special strains of fish to match the habitat. An excellent year class of Yellowstone cutthroat at Clark's Fork Hatchery enabled the program to reestablish Yellowstone cutthroat in the drainage area to get in the full swing. A brood stock of ohrid brown trout has been established at the Tensleep Hatchery. An old stock was originally held at Story but deleted due to disease and lack of response in the wild. However, a number of these fish were found in Pathfinder Reservoir in the past year and it was felt it may be valuable to

reestablish the stock.

Lake DeSmet rainbow spawning operation had to use a temporary trap again this year due to low water, but sufficient eggs were taken to meet our needs. Spawning walleye in Keyhole and Glendo was successful enough to meet most of the state demands. An egg eyeing and hatching facility was constructed with Bureau of Reclamation funds at Flume Creek below Fontenelle Reservoir. This project will be used primarily to develop spawning runs of Eagle Lake and McConaughy rainbow and kokanee salmon for Flaming Gorge Reservoir and Green River. Early spawn kokanee eggs were collected from Sheep Creek in Utah and late spawning kokanee eggs from the Green River. These fish were hatched with very high survival.

Major construction projects included domestic water lines replacement at Auburn, replacement of concrete raceway walls at Boulder and Daniel, new head through at Como Bluff, a water collection facility at Dubois Hatchery, a new roof on a hatchery building at Daniel, a concrete catch basin at Story Hatchery, a new domestic water pressure system at Speas Hatchery and a shop building at Tensleep Hatchery.

GAME DIVISION
REX CORSI, CHIEF GAME WARDEN

Information on wildlife numbers, reproduction, natural mortality, take by hunters, and habitat conditions was gathered and analyzed for making decisions and recommendations on wildlife management. With the continued land use changes and projects by people, wildlife habitat continues to be lost. Our recommendations toward habitat preservation to individuals, companies, state, and federal agencies resulted in some alteration of original plans and ultimately the saving of some wildlife that would have been lost. The Division has found it difficult to keep pace with the rapid changes and proposed projects which potentially can cause wildlife habitat loss. In 1970, we investigated and made recommendations on about 60 proposed projects and this escalated to 30 to 40 a month in 1981.

Many of the Division's buildings were investigated as to insulation needs for energy conservation and about $20,000 was expended improving insulation. Vehicles driven by personnel were purchased so as to result in cost savings to the Division in maintenance and operation costs. The Division is now using several mid-size pickup trucks and smaller engines in all vehicles.

Many check stations which have in past years been operated in the fall were not in use during this year because of budget limitations. Only the Dubois check station and the North Fork and Sunlight check stations by Cody were in operation with hired attendants.

Bighorn sheep were trapped near Dubois and transplanted to other sites. During the year transplants were accomplished as follows:

20 bighorn sheep to Marshall
21 bighorn sheep to Mt. Nebo, Utah

Extreme deep snow conditions in the Star Valley and Cokeville areas resulted in the Division feeding elk in three locations, in addition to our existing feedgrounds. One site just east of the Idaho line in Star Valley was a jointly funded operation with the Idaho Department of Fish and Game.

Intensive planning for wildlife on a herd unit basis was a subject discussed with the public at meetings in various locations of the state. Meetings were held to seek comments and recommendations on wildlife numbers and management. During the next two years additional meetings will be held in our process of updating the Strategic Plan for Wildlife in Wyoming.

During the fall a black-footed ferret was found dead on a ranch west of Meeteetse. The black-footed ferret is on the Endangered Species List. Considering the extreme scarcity of this animal and the importance of establishing proper controls in research and management systems, the Department named a person to act as chairman of an ad hoc group to review all proposed research and management and make recommendations to the Department. Following the finding of the dead animal, researchers have verified the existence of additional live black-footed ferrets in the area.

Noncompliance with wildlife and watercraft laws and regulations is a continuing problem and seems to increase as Wyoming's human population grows. It is encouraging to note more people are aware of the problem and are showing a willingness to become involved in reporting violations. Our continuation of the toll-free number that people can call to report violations, along with the Wyoming Wildlife Protectors Association's reward payment to persons reporting violations, have become an ongoing procedure with the Division. This "Stop Poaching" program has resulted to date in receiving over 500 reports of violations with 132 cases cleared and 275 citations issued. Arrests and fines for the last 10 years are shown in Table 1.

Table 1. Arrests, Fines, Dismissals - 10-Year Comparison

Year	Arrests	Fines	Not Guilty, Dismissed, or Fail to Appear
1973	1,853	$ 97,360.00	66
1974	2,018	117,811.00	52
1975 (Jan.-June)	625	38,737.00	26
1976 (Fiscal Year)	2,367	137,012.00	55
1977 (Fiscal Year)	2,478	153,059.00	87
1978 (Fiscal Year)	2,646	168,314.00	46
1979 (Fiscal Year)	3,328	204,978.00	63
1980 (Fiscal Year)	2,761	215,238.00	112
1981 (Fiscal Year)	2,606	188,561.50	113
1982 (Fiscal Year)	2,800	260,980.10	134

During the year, two enforcement specialists either retired or resigned and these two positions were not filled. The moneys in the budget for one of the enforcement specialists was used to hire an additional game warden and create a new warden district at Elk Mountain. A mobile home that had been contributed to the Department in 1978 by Texasgulf, Inc. was moved to Elk Mountain for a living facility.

Potential damage by wildlife to private property resulted in personnel expending considerable time trying to alleviate problems and investigating and reporting on damage claims filed. A record of claims paid for damage caused by wildlife is shown in Table 2.

Table 2. Damage Claims Paid - 10-Year Comparison

Year	Amount Paid	Year	Amount Paid
1973	$60,444.00	1978 (Fiscal Year)	$ 36,683.00
1974	31,312.00	1979 (Fiscal Year)	60,719.00
1975 (Jan.-June)	20,458.00	1980 (Fiscal Year)	111,148.00
1976 (Fiscal Year)	47,851.00	1981 (Fiscal Year)	128,588.68
1977 (Fiscal Year)	23,958.00	1982 (Fiscal Year)	92,729.01

Enhancement projects for which the Division had funding are shown below:

Airplane Flight Time - District I - An intensive aerial survey by use of helicopters to determine moose numbers was conducted and adjustments were made in allowable harvest. Some restriction was necessary to prevent over-harvest of the moose herd.

Peregrine Falcon Reintroduction - The Division reintroduced eight peregrine falcons into historical ranges in Grand Teton National Park. The transplant operation appears to have been successful with this endangered species. One-half the cost ($4,600) of reintroduction was donated by the Rocky Mountain Conservation Fund. Birds planted in previous years have been observed returning to nest site areas.

Horse Allowance for Division Personnel - To accommodate the increased expenses incurred by Division personnel to maintain horses for use on Department business, the monthly allowance to those personnel was increased. There was an increase of $5.00 per month for both horse rental and horse feed, thus allowing a total of $30.00 per month when the horses are not being maintained on Department lands.

Wildlife Observation System - This system continued to provide valuable data during this past year. Data from the system are being used by Game and Fish personnel, personnel of Federal agencies and numerous private individuals and corporations. All Game Division Districts are using the system, and the Fish Division is using the system for reptiles and amphibians. There are approximately 220,000 records presently on the system. The Bureau of Land Management is also using the system and is providing financial support.

Pumpkin Buttes Study - Study was initiated in April to collect baseline data for evaluating impacts of future energy development. The study area is unique in that it contains a high density of nesting raptors that are isolated from adjacent populations. This isolation will allow researchers to more adequately determine impacts on a population. Information on movement, key use areas, food habits, prey abundance, production and disturbance is being collected. Work is concentrated in one relatively small study area. Findings of the study should be applicable throughout the state.

Simulation Modelling - The enhancement for implementing population modelling was continued during F.Y.82. Approximately 80% of the state's big game populations have been modelled to date. Much of the work on the project during F.Y.82 consisted of updates of existing models and the development of new models. The modelling effort provided substantial information useful in making herd management decisions and responding to requests for population data by other agencies.

In addition to Program ONEPOP, the Division purchased a new model Program POP50. This model is based on the same concepts as ONEPOP; however, it is self-contained on the Division's Tecktronix 4051 computer terminal. POP50 is much faster than the previous model, and the cost per operation is only a fraction of ONEPOP production costs. The POP50 system is completely portable and allows modelling in field locations.

Forest Park Feedground - This new elk feedground was in full operation this second year of its existence. A bridge was constructed across Greys River to provide large truck access in hauling feed.

Statewide Radio System - The state agency law enforcement communication system is now operational and enables law enforcement personnel to communicate with one another.

Medicine Bow Wind Energy Project - The Bureau of Reclamation provided the fifth year of funding for wildlife studies on the Medicine Bow Wind Energy Project. On this project the Department intends to determine the impacts on wildlife of wind farm construction. We have assembled four years of preconstruction data on habitat, raptors, big game, sage grouse, and waterfowl. Two test wind generators were erected in 1981, and we will be evaluating impacts of these windmills on wildlife in order to formulate mitigation recommendations, if they are necessary.

RESEARCH AND DEVELOPMENT DIVISION
CHESTER ANDERSON, CHIEF

RESEARCH - To assist in the management of Wyoming's wildlife, sixteen research and four service activities received major attention. Included in the service work was the preparation and aging of 2,000 game animal and bobcat teeth; analysis of water, soil, and feed samples for various physical

and chemical properties; testing of bird and mammal meat and fat for levels of endrin (all meat samples were below those considered dangerous to human health); identification of species, determination of cause and time of death, matching of parts and pieces of animals and maintenance of confiscated wildlife to assist law enforcement officers investigate some forty violations.

Research reports were completed on studies of damage by white-tailed deer to croplands in Crook County. Initial evaluation of strain 19 Brucella vaccine in elk showed there is a good possibility a vaccine control program may be developed in the near future for brucellosis in feedground herds. Studies are continuing. Evidence of alternate-year reproduction in bighorn sheep at Dubois was strongly indicated as the cause of low reproduction.

Leptospirosis, a reproductive disease of cattle is being investigated in pronghorn at the Sybille Wildlife Research Unit in cooperation with the Colorado Division of Wildlife and Colorado State University. Results will be available next year. The 1981 deer hunt on a 4.2-section portion of the Unit netted 38 mule deer by 215 hunters which is near the 25-year average. Other recreation and information activities performed at Sybille included hosting 36 group tours of the research facilities where some 850 people were able to learn first hand about many of the wildlife of the state and see research in action. Separate one-week youth conservation camps for selected Wyoming boys and girls were again hosted at Sybille. In addition fishing, camping, picnicking, and wildlife viewing were enjoyed by hundreds more people who visited the area.

Study of the food habits of black bears in western Wyoming's Greys River area will continue through mid 1982 with management information valuable to both the U.S. Forest Service and the Department the ultimate outcome. Another study also being done in conjunction with the University of Wyoming and the Cooperative Fishery and Wildlife Research Unit there involves determining habitat use, abundance, and movements of mountain lions near Tensleep on the west side of the Big Horn Mountains. Much information is being gained by capturing lions and marking them with radio collars and other devices as well as from other field procedures.

Work continued on control and prevention of diseases in wild and cultured fish and an extensive survey of many of the cultures and wild fish of the state was made to detect possible low level infections of diseases considered of importance by fish health experts throughout the country. As a result of a rigorous fish health program, Wyoming has few of the fish disease problems causing serious losses in adjacent states. The study to control kidney disease in a wild trout population is near completion and one to inventory and describe the parasites of fishes in Wyoming was emphasized to complete the laboratory work by late 1982. A manuscript will be prepared for publication by 1985, finances permitting.

These special projects along with the routine drafting load have created a full workload for the drafting section.

LANDS - A use trade involving parking areas was executed on the Department's North Platte River easement south of Douglas off of the Esterbrook highway. The trade allows the landowner to use a portion of the Department's original parking area in exchange for public use of a new parking area to be constructed at the landowners expense.

A lease with Pacific Power and Light Company for public fishing purposes on the North Platte River northwest of Saratoga was successfully renewed for an additional five years.

Permission was obtained from the Department of Public Lands to identify by signs all state land along the North Platte River from Alcova to the Nebraska state line. This is the first phase of a project to identify, acquire, develop and maintain put-in, take-out spots for float fishermen.

An agreement was executed with Lincoln County to cooperate in formally establishing certain public road in Lincoln County which facilitate access to Department public fishing easements on the Salt River.

A warden station at Mountain View was acquired and is now in operation. Money for the acquisition came from a cooperative agreement with the Overthrust Industrial Association which was designed to increase game enforcement in the Overthrust Area.

A one-acre site was acquired from the Bureau of Land Management near Saratoga Lake to relocate a storage yard from within a subdivision within the town of Saratoga.

A report detailing procedures for acquiring Wildlife Conservation Easements was prepared and approved by the Commission.

An additional 47.50 acres of land was acquired at the Rawhide Unit near Torrington. In addition, the Department has an option contract to purchase an additional 18.80 acres. This increases the total land purchased at Rawhide to approximately 650 acres. This land is being acquired as replacement riparian habitat due to the inundation of similar habitat by the construction of Grayrocks Reservoir. Monies for this mitigation are the result of a cooperative agreement between the Department and Missouri Basin Power Cooperative.

A pipeline easement was granted to an adjoining landowner at the Amsden Creek Unit and a road easement through an isolated tract of land at the Greys River Unit was granted to Lincoln County.

In addition to these completed projects several were started and are in various stages of completion.

Ongoing activities include maintenance of Department land records, paying leases on Department lands and maintaining land an mineral status maps for the Department land management inventories.

Design and specifications were prepared for the remodeling of the basement of the Greybull Warden Station to create an office and an extra bedroom. Plans and specifications were prepared to install six inches of insulation and ceiling tile at the Casper Game Warden's Residence. Plans and Specifications were prepared to drill and case a water well, install a pitless adapter, pressure tank, electrical and water lines at the East Fork Unit headquarters.

Plans, specifications, and contracts were prepared to maintain approximately 12 miles of the Pinedale elk fence near the Soda Lake Wildlife Habitat Management Unit; for the construction of approximately 10 miles of stock fence on the Renner Wildlife Habitat Management Unit near Tensleep; and approximately 3¼ miles of stock fence on the Rawhide Wildlife Habitat Management Unit near Torrington.

Footings were designed for the Dubois Fish Hatchery shop building and specifications were prepared to seal coat the Casper District Office parking area. Detailed plans were prepared for the Laramie River habitat improvement project showing rock and log placement. A survey was made on the access of a parking area on the North Platte River near Douglas.

The ditches and hay lands were surveyed on the Seedskadee Unit to determine drainage problems. The right of way for the East Fork telephone line was plotted and turned over to the telephone company. Part of the Yellowtail Wildlife Habitat Management Unit was surveyed and plotted to establish water rights for the Unit.

The irrigated fields on the Renner Wildlife Habitat Management Unit were surveyed and plotted to update the water rights. A significant amount of engineering time was used to update the Como Fish Hatchery water rights, but this project will require more time prior to being turned over to the State Engineer.

In December of 1981, the Engineering Branch initiated a two-year drafting project in conjunction with the Lands Branch and Habitat Management Branch to update the inventory system for the Department's Wildlife Habitat Management Units. This involves acquisition of current aerial photo, mosaics for each unit, and drafting overlays of various biological and physical inventories to fit the mosaic.

The first portion of the drafting was completed for the Game Division's Recluse Project. This involved plotting the fall and winter distribution of deer, antelope, and turkey on 38 topographic maps covering a large area of northeastern Wyoming. This project is a 100 percent reimbursable project for the Bureau of Land Management.

A project to revise the float maps for the North Platte River is approximately 75 percent complete.

The second edition of Diseases of Wildlife in Wyoming was in press at the end of June. This 353-page book is a major update on the state of knowledge of diseases of wildlife both locally and regionally, that are important to wildlife managers, livestock, people, and those concerned with public health. The book is available at the Department's Special Publications Office. Numerous additional disease cases in mammals and birds were studied as part of the Department's ongoing disease surveillance and public relations program.

HABITAT MANAGEMENT - This branch assumes responsibility for the development and management of the wildlife habitat units and public fishing and hunting areas acquired by purchase of easements, cooperative agreements, etc. Management of the game and fish which use these lands and waters remains the responsibility of the Game and Fish Divisions, so all aspects of land and wildlife management must be closely coordinated. The Habitat Management Branch managed 30 game habitat units totaling 257,849 acres and public fishing and hunting access areas located on almost all major rivers and streams and a number of lakes and reservoirs in Wyoming.

Range studies to collect data needed to properly manage the big game winter ranges were conducted on the Medicine Lodge, Bud Love, Whiskey Basin, East Fork, Wick Brothers, Greys River, and Laramie Peak Units.

A fence maintenance contract on six miles of the Pinedale elk drift fence and seven and one-half miles of new stock fence on the Renner Unit was inspected to assure compliance with the contract. Major maintenance was necessary on the East Fork elk drift fence near Dubois to repair damage caused by a flood.

A contract was signed with the Bureau of Land Management involving habitat improvement studies on bighorn sheep on the Whiskey Basin Unit. Funds received from the BLM were used to install 1,300 feet of snow fence and treat twelve acres with a hodder-gouger to improve range condition.

Bid proposals and contracts were prepared for grazing, farming, or combination grazing and farming leases on the Ocean Lake, Greys River, Sand Mesa, and Renner Units.

Meadows were reseeded on the Sunlight and East Fork Units. Elk use on the meadows on the two units is heavy and optimum production must be maintained. The Soil Conservation Service provided seed to reseed 16 acres of the total of 47 acres reseeded on the East Fork Unit.

Routine annual operation and maintenance activities on the units include the following: maintenance of access roads, public parking areas, dams and dikes, stock fences, elk drift fences, irrigation systems, buildings, canals supplying water to ponds and reservoirs, maintenance of equipment and numerous other activities. Wood duck nesting boxes were installed on

the Yellowtail and Rawhide Units. Nine islands were constructed on the Table Mountain Unit to increase production of Canada geese.

A public parking area was constructed along the North Platte River in Casper to provide public access to about one-half mile of stream. Bid proposals and contracts were prepared to haul rock riprap to repair the dam on Saratoga Lake. The access road to Twin Buttes Reservoir, west of Laramie, required major maintenance. Routine maintenance on access roads, vehicle barriers, signs, and sanitation facilities on public fishing areas located throughout the state was a time consuming activity.

Stream improvement projects to improve fisheries habitat and prevent erosion were conducted on Salt and Huff Creeks near Cokeville, Tosi Creek north of Cora, and Medicine Lodge Creek near Hyattville.

A wildlife habitat improvement plan was prepared for the Grayrocks Unit east of Wheatland.

Data was collected on non-game birds on a number of units primarily to obtain an inventory of species.

Due to the increased requests for mineral exploration permits and leases on Department lands, a major effort was made to update current biological and physical inventories in order to prepare mineral management plans. This will enable the Department to make sound decisions based on the effects of the proposed action on the wildlife resource.

ENGINEERING - Even though no money was available for major capital expenditures this year, many maintenance and operations projects and projects funded from outside of the Department have kept the Engineering Branch working to its full capacity.

A 50-foot bridge was designed and constructed over the Greys River approximately 36 miles southeast of Alpine Junction which gave access to the Upper Greys River elk feedground.

A spawning building was designed and constructed and a water supply system was designed for an unmanned fish hatchery below Fontenelle Dam. This facility is capable of hatching 560,000 eggs per year.

Plans and specifications were prepared for a $376,000 project to quarry, load, haul, and place large rock in the Green River below Fontenelle Dam for stream habitat improvement for the Fish Division.

A truss roof was designed and constructed on the Daniel Fish Hatchery roof to eliminate the existing problem of leakage into the stored fish food and office building.

INDIVIDUAL MANAGEMENT PROGRAMS

OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE 63,500 ANTELOPE FOR HARVEST AT A RATE OF 89 PERCENT SUCCESS AND 2.4 DAYS OF HUNTING PER ANIMAL TAKEN. THIS WILL PRODUCE 150,000 HUNTER RECREATION DAYS ANNUALLY.

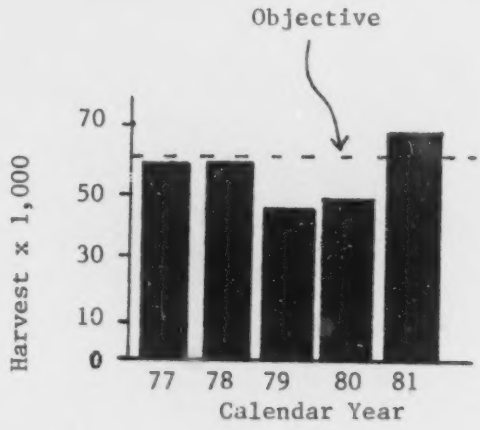
During 1981, 67,801 antelope were harvested at a hunter success rate of 88 percent. 181 animals were killed on the state's highways. The estimated 1981-1982 post-harvest wintering population was 317,000.

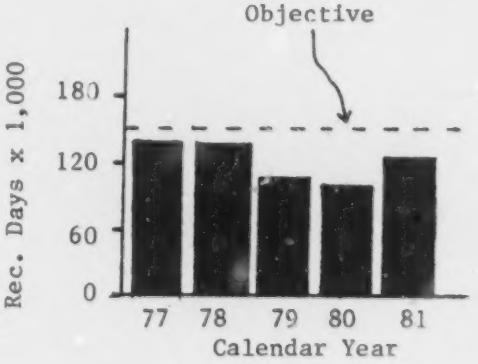
An average of 1.8 days of hunting per animal harvested resulted in a total of approximately 123,000 days afield hunting antelope. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.

Antelope hunters expended an average of $120.41 per hunting day resulting in over $14,820,000 in expenditures throughout the state.

A total of 77,327 antelope licenses were sold during the 1981 season. Based upon statewide averages during the initial drawing, there was a demand rate of 0.9 applicants for each license available.

Sales of antelope licenses resulted in a total of $3,141,674 in revenue to the Department. Costs of antelope management in Wyoming totaled $1,407,200 for all activities, resulting in a net revenue of $1,734,474 for the program. The total cost to the Department was $20.75 and the return to the state's economy was $218.63 for each antelope harvested.





Five-year trends in the pronghorn antelope program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	58,858	134,526	90%	2.30	66,173	2,149,902	990,081	14,267,727
FY79	58,132	136,642	87%	2.35	66,461	1,983,571	1,280,290	14,425,807
FY80	44,616	106,144	84%	2.38	53,208	1,371,826	1,233,167	11,618,233
FY81	47,994	95,144	84%	1.98	56,909	2,265,558	1,442,404	12,681,619
FY82	67,801	123,101	88%	1.82	77,327	3,141,674	1,407,200	14,823,181

OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 17,000 ELK FOR HARVEST AT A RATE OF 24 PERCENT SUCCESS AND 18.0 DAYS OF HUNTING PER ANIMAL TAKEN. THIS WILL PRODUCE 307,000 HUNTER RECREATION DAYS ANNUALLY.

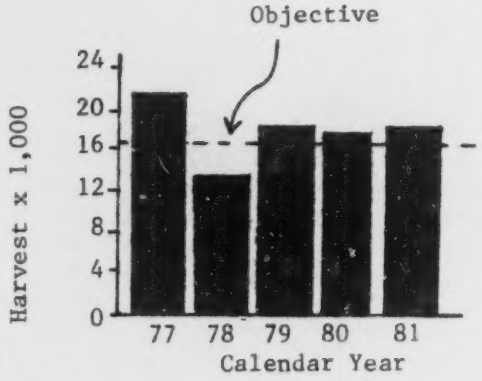
During 1981, 18,713 elk were harvested at a hunter success rate of 29 percent. Six animals were killed on the state's highways. The estimated 1981-1982 post-harvest wintering population was 68,000.

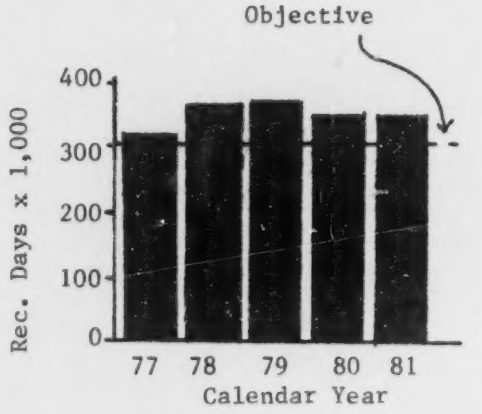
An average of 18.5 days of hunting per animal harvested resulted in a total of approximately 346,000 days afield hunting elk. No data are available regarding days spent in nonconsumptive endeavors as observation, photography, nature study, etc.

Elk hunters expended an average of $73.46 per hunting day resulting in over $25,430,000 in expenditures throughout the state.

A total of 64,205 elk licenses were sold during the 1981 season. Based upon total applicants, the nonresident demand rate was 2.0 applicants for each license available. The resident demand rate for limited quota areas was 1.5 applicants for each license available.

Sale of elk licenses resulted in a total of $2,935,145 in revenue to the Department. Cost of elk management in Wyoming totaled $2,455,242 for all activities, resulting in a net revenue of $479,903 for the program. The total cost to the Department was $131.20 and the return to the state's economy was $1,359.00 for each elk harvested.





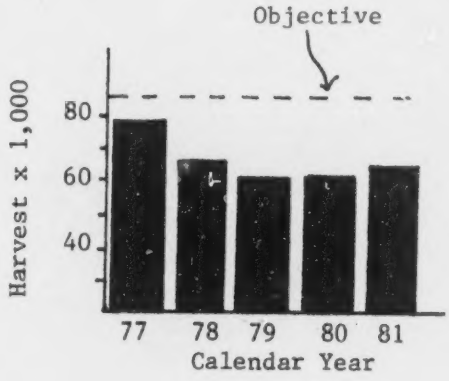
Five-year trends in the elk program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	21,784	317,021	35.5%	14.6	61,329	1,571,685	1,833,758	13,761,336
FY79	13,507	358,685	19.9%	26.6	68,004	1,672,150	2,263,280	14,951,525
FY80	18,580	364,003	26.5%	19.6	70,102	1,702,620	2,449,666	16,653,851
FY81	17,428	342,824	27.9%	19.7	62,533	2,910,335	2,280,703	19,461,781
FY82	18,713	346,190	29.1%	18.5	64,205	2,935,145	2,455,242	25,431,524

OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 86,000 DEER FOR HARVEST AT A RATE OF 50 PERCENT SUCCESS AND 5.7 DAYS OF HUNTING PER ANIMAL TAKEN. THIS WILL PRODUCE 492,000 HUNTER RECREATION DAYS ANNUALLY.

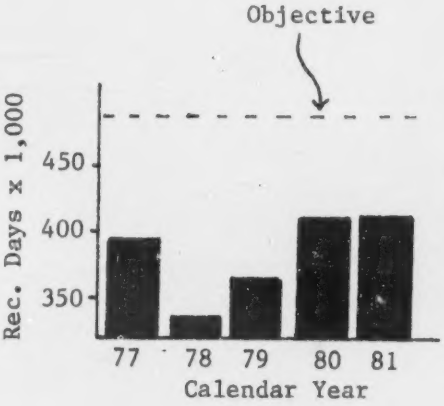
During 1981, 66,000 deer were harvested at a hunter success rate of 57 percent. 738 animals were killed on the state's highways. The estimated 1981-1982 post-harvest wintering population was 416,000 animals.

An average of 6.3 days of hunting per animal harvested resulted in a total of approximately 417,000 days afield hunting deer. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.



Deer hunters expended an average of $63.00 per hunting day resulting in over $26,740,000 in expenditures throughout the state.

A total of 115,460 deer licenses were sold during the 1981 season. Based upon statewide averages during the initial drawing, there was a demand rate of 0.9 applicants for each nonresident license available.



Sales of deer licenses resulted in a total of $4,517,571 in revenue to the Department. Costs of deer management in Wyoming totaled $1,253,281 for all activities, resulting in a net revenue of $3,264,290 for the program. The total cost to the Department was $18.96 and the return to the state's economy was $406.76 for each deer harvested.

Five-year trends in the deer program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	79,687	390,466	72%	4.9	110,388	2,754,264	1,595,285	22,422,723
FY79	67,401	335,449	58%	5.0	115,905	2,620,920	1,769,312	21,603,428
FY80	61,243	369,060	53%	6.0	116,212	2,538,107	1,503,069	23,459,227
FY81	61,100	416,040	56%	6.8	110,058	4,234,888	1,557,533	26,351,707
FY82	66,090	417,040	57%	6.3	115,460	4,517,571	1,253,281	26,746,462

OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 1,442 MOOSE FOR HARVEST AT A RATE OF 82 PERCENT SUCCESS AND 6.1 DAYS OF HUNTING PER ANIMAL TAKEN. THIS WILL PRODUCE 8,700 HUNTER RECREATION DAYS ANNUALLY.

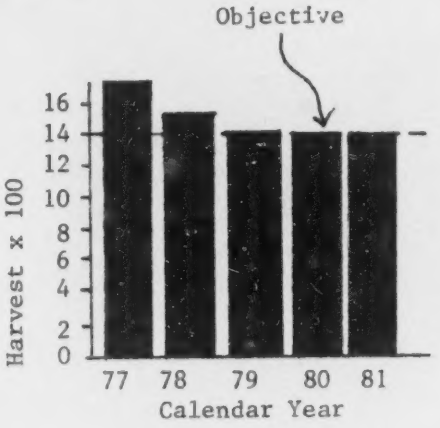
During 1981, 1,369 moose were harvested at a hunter success rate of 85 percent. Five animals were killed on the state's highways. The estimated 1981-1982 post-harvest wintering population was 7,300 animals.

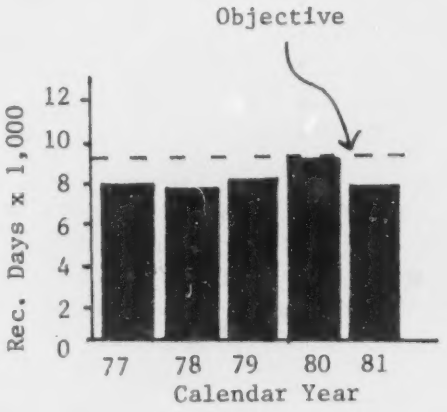
An average of 5.4 days of hunting per animal harvested resulted in a total of approximately 7,350 days afield hunting moose. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.

Moose hunters expended an average of $95.32 per hunting day resulting in over $700,000 in expenditures throughout the state.

A total of 1,613 moose licenses were sold during the 1981 season. Based upon statewide averages during the initial drawing, there was a demand rate of 12.2 applicants for each license available.

Sales of moose licenses resulted in a total of $150,650 in revenue to the Department. Costs of moose management in Wyoming totaled $200,787 for all activities, resulting in a net cost of $50,137 for the program. The total cost to the Department was $146.67 and the return to the state's economy was $511.89 for each moose harvested.





Five-year trends in the moose program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	1,697	7,480	90%	4.4	1,894	85,150	87,403	520,711
FY79	1,503	7,328	84%	4.9	1,789	80,425	112,555	521,709
FY80	1,448	7,750	83%	5.4	1,740	78,100	212,847	557,625
FY81	1,413	8,456	84%	6.0	1,689	164,600	217,820	674,165
FY82	1,369	7,352	85%	5.4	1,613	150,650	200,787	700,778

OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 236 BIGHORN SHEEP FOR HARVEST AT A RATE OF 46 PERCENT SUCCESS AND 18.2 DAYS OF HUNTING PER ANIMAL TAKEN. THIS WILL PRODUCE 4,284 HUNTER RECREATION DAYS ANNUALLY.

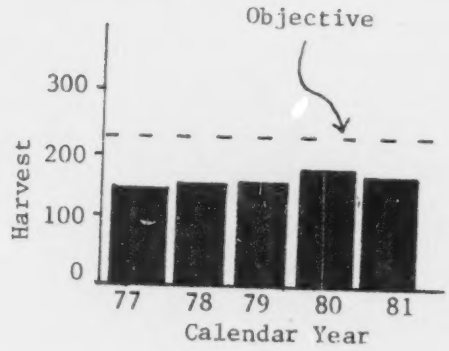
During 1981, 174 Bighorn sheep were harvested at a hunter success rate of 49 percent. The estimated 1981-1982 post-harvest wintering population was 6,157 animals.

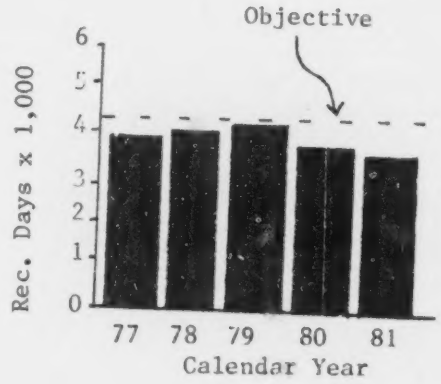
An average of 20.1 days of hunting per animal harvested resulted in a total of approximately 3,500 days afield hunting Bighorn sheep. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.

Bighorn sheep hunters expended an average of $138.28 per hunting day resulting in over $484,000 in expenditures throughout the state.

A total of 352 Bighorn sheep licenses were sold during the 1981 season. Based upon statewide averages during the initial drawing, there was a demand rate of 13.4 applicants for each license available.

Sales of Bighorn sheep licenses resulted in a total of $48,050 in revenue to the Department. Costs of Bighorn sheep management in Wyoming totaled $344,340 for all activities, resulting in a net cost of $296,290 for the program. The total cost to the Department was $1,978.97 and the return to the state's economy was $2,785.00 for each Bighorn sheep harvested.





Five-year trends in the Bighorn sheep program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	147	3,956	38%	26.9	389	23,550	181,252	218,220
FY79	161	4,004	42%	24.9	383	23,250	303,878	229,809
FY80	167	4,105	43%	24.6	387	23,370	309,963	253,836
FY81	182	3,726	50%	20.5	364	50,050	288,206	292,611
FY82	174	3,505	49%	20.1	352	48,050	344,340	484,674

OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 15 ROCKY MOUNTAIN GOATS FOR HARVEST AT A RATE OF 39 PERCENT SUCCESS AND 15 DAYS OF HUNTING PER ANIMAL TAKEN. THIS WILL PRODUCE 225 HUNTER RECREATION DAYS ANNUALLY.

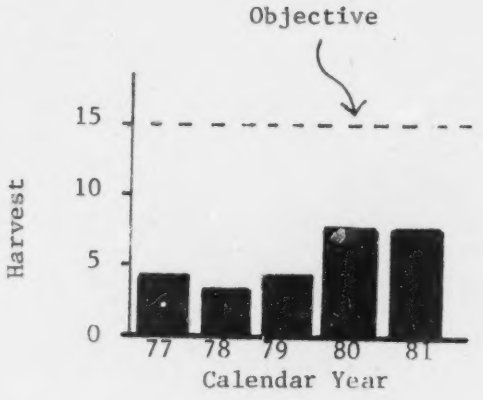
During 1981, 7 mountain goats were harvested at a hunter success rate of 88 percent. The 1981-1982 post-harvest wintering population is 70 animals.

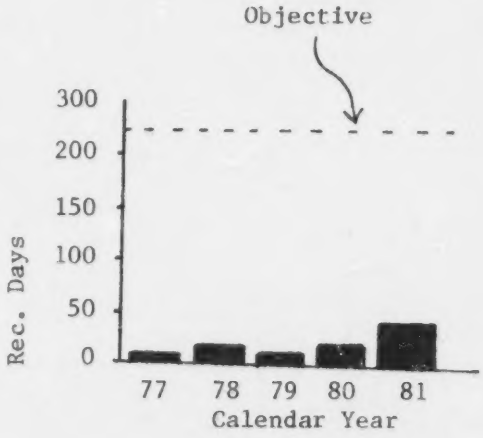
An average of 6.1 days of hunting per animal harvested resulted in a total of 43 days afield hunting mountain goats. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.

Assuming mountain goat hunters expended approximately the same per hunting day as sheep hunters ($138.28), there was a total of over $5,900 in expenditures throughout the state.

A total of 8 mountain goat licenses were sold during the 1981 season. Based upon statewide averages during the initial drawing, there was a demand of 116 applicants for each license available.

Sales of mountain goat licenses resulted in a total of $1,300 in revenue to the Department. Costs of mountain goat management in Wyoming totaled $41,986 for all activities, resulting in a net cost of $40,686 for the program. The total cost to the Department was $5,998 and the return to the state's economy is $849 for each mountain goat harvested.





Five-year trends in the Rocky Mountain goat program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	4	10	100%	2.5	4	240	17,605	551*
FY79	3	20	75%	6.7	4	240	22,559	1,148*
FY80	4	13	100%	3.2	4	240	21,090	804*
FY81	7	19	88%	2.7	8	1,300	61,697	1,497*
FY82	7	43	88%	6.1	8	1,300	41,986	5,946*

*No data exist on which to base these assumptions.

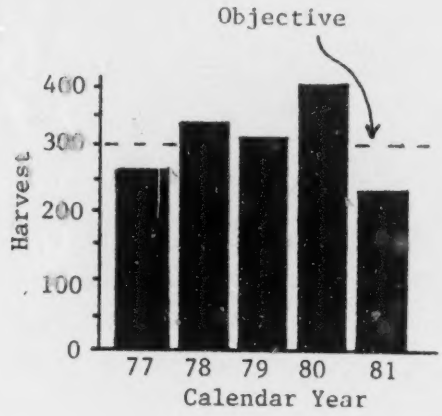
OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 300 BLACK BEAR FOR HARVEST AT A RATE OF 10 PERCENT SUCCESS AND 40 DAYS OF HUNTING PER ANIMAL TAKEN. THIS WILL PRODUCE 12,000 HUNTER RECREATION DAYS ANNUALLY.

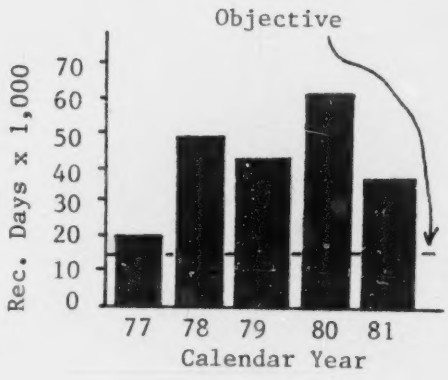
During 1981, 236 black bear were harvested of which 113 were harvested during the spring season and 123 during the fall season. The estimated 1981-1982 post-harvest wintering population was 2,275 animals.

An average of 158.1 days of hunting per animal harvested resulted in a total of approximately 37,000 days afield hunting black bear. No data are available regarding days spent in such nonconsumptive endeavors as observations, photography, nature study, etc.

The 650 nonresident black bear hunters spent an average of $546.80 per individual in pursuit of this species. This resulted in over $355,000 in expenditures in the state. Total resident expenditures are not known. A total of 1,804** black bear licenses were sold during the 1981 season.

*Sales of black bear licenses resulted in a total of $53,600 in revenue to the Department. Costs of black bear management per se in Wyoming cannot be determined. Management costs for all bear, including grizzly, were $229,477. The return to the state's economy was at least $1,506 for each black bear harvested.





Five-year trends in the black bear program in the state of Wyoming.

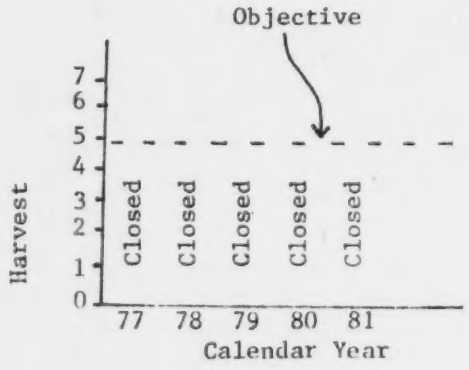
Fiscal Year	Harvest	Rec. Days	Success	Days/ Animal	*Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	268	20,741	---	77.4	1,055	30,525	95,164+	635,831**
FY79	342	48,183	---	140.9	1,245	36,475	110,833+	838,269**
FY80	311	42,031	---	135.1	1,331	38,830	138,377+	996,209**
FY81	408	62,612	---	153.5	1,588	50,520	215,137+	757,039**
FY82	236	37,312	---	158.1	1,804	53,600	229,477+	355,421**

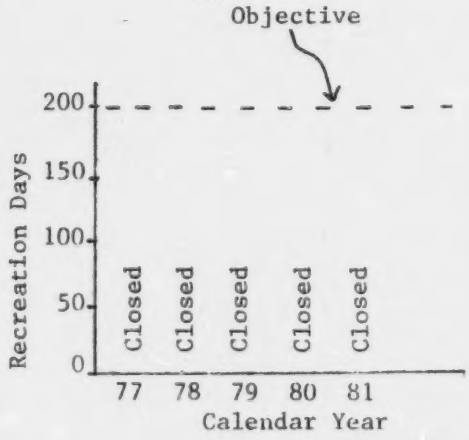
* Sale of bear licenses only. Does not include individuals possessing resident elk licenses which allow these individuals to take black bear also.
** Nonresident bear hunters only.
\+ Includes grizzly bear management.

OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 5 GRIZZLY BEAR FOR HARVEST AT A RATE OF 25 PERCENT SUCCESS AND 40 DAYS OF HUNTING PER ANIMAL TAKEN. THIS WILL PRODUCE 200 HUNTER RECREATION DAYS ANNUALLY.

At present, the species is classified as threatened and there is a moratorium on hunting. The estimated 1981-1982 wintering population, exclusive of the Yellowstone National Park population, was 95 grizzly bear. At present, no data are available regarding the number of days spent in nonconsumptive endeavors of observation, photography, nature study, etc. that are directed at this species.

Management costs for all bear species (black and grizzly) totaled $229,477.





Five-year trends in the grizzly bear program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	--	--	--	--	--	--	95,164*	--
FY79	--	--	--	--	--	--	110,833*	--
FY80	--	--	--	--	--	--	138,377*	--
FY81	--	--	--	--	--	--	215,137*	--
FY82	--	--	--	--	--	--	229,477*	--

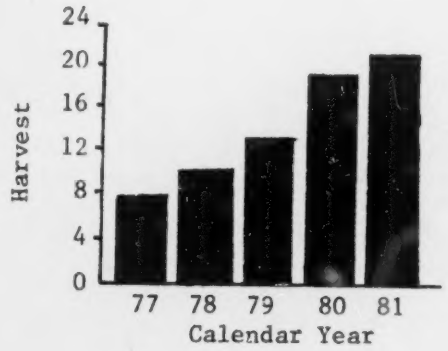
*Management costs include both black and grizzly bear.

OBJECTIVE: THE OBJECTIVE FOR THIS PROGRAM IS TO ESTIMATE THE NUMBER OF MOUNTAIN LION IN THE STATE AND DETERMINE THE EFFECTS OF HARVEST.

During 1981, 21 mountain lion were harvested at a hunter success rate of 16 percent. The population density of this species in Wyoming is unknown at present.

No data are available regarding recreation days furnished by this species, nor are data available regarding days spent on such nonconsumptive endeavors as observation, photography, nature study, etc.

A total of 134 mountain lion licenses were sold during the 1981 season. Sales of licenses resulted in a total of $3,240 in revenue to the Department. Costs of lion management in Wyoming totaled $363,948 for all activities, resulting in a net cost of $360,708 for the program. The total cost to the Department was $17,331.86 for each lion harvested.

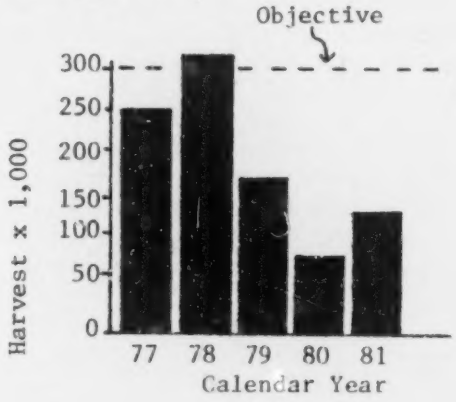


Five-year trends in the mountain lion program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	8	--	18%	--	44	960	1,008	--
FY79	10	--	16%	--	64	1,440	8,559	--
FY80	13	--	14%	--	90	1,880	73,603	--
FY81	18	--	20%	--	90	2,200	180,328	--
FY82	21	--	16%	--	134	3,240	363,948	--

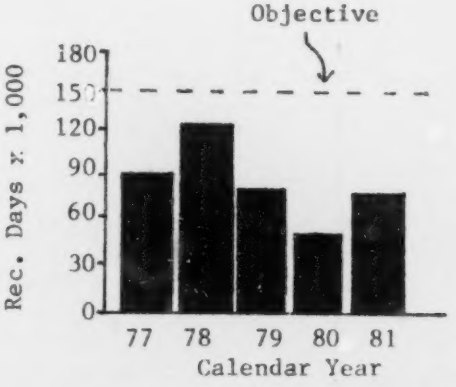
OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 285,674 COTTONTAILS, 10,448 SQUIRRELS AND 5,260 SNOWSHOE HARES FOR HARVEST AT A RATE OF 2.1, 1.4 AND 0.9 ANIMALS PER DAY, RESPECTIVELY. THIS WILL PRODUCE ANNUALLY 134,383, 7,321 AND 5,815 HUNTER RECREATION DAYS, RESPECTIVELY.

During 1981, 123,759 cottontails, 3,226 snowshoe hares and 4,914 squirrels were harvested at a rate of 14.2, 3.2 and 7.1 animals, respectively per hunter. The average number of animals harvested per day was 1.8, 0.7 and 1.7, respectively. This resulted in a total of 76,882 hunter recreation days of which 69,450 were for cottontail, 4,611 for snowshoe hare and 2,821 for squirrels. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.



Small game hunters expended approximately $76.06 per hunting day and the 76,882 days spent by hunters in pursuit of these species resulted in $5,848,012 in expenditures throughout the state.

A total of 12,884 small game licenses were sold during the 1981 season. Sales of small game licenses resulted in a total of $79,600 in revenue to the Department. Costs of small game management in Wyoming totaled $12,349 for all activities, resulting in a net revenue of $67,251 for the program. The total cost to the Department was 9¢ and the return to the state's economy was $44.34 for each small game animal harvested.



Five-year trends in the small game mammals program in the state of Wyoming.

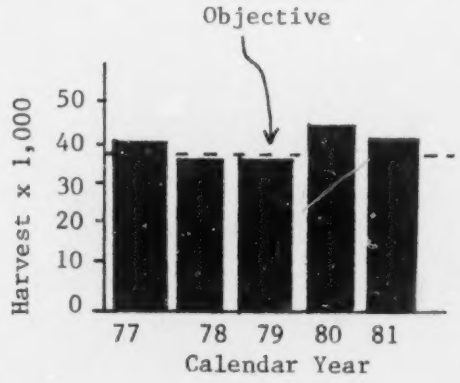
Fiscal Year	Harvest	Rec. Days	Animals/ Hunter	Animals/ Day	No. of Hunters	Lic. ($) Revenue	Mgmt. Costs	Hunter ($) Expend.
FY78	253,970	90,686	12.0	2.8	21,226	84,377	16,529	2,686,298
FY79	332,196	122,561	11.7	2.7	28,484	104,670	16,660	3,602,236
FY80	163,425	79,553	8.8	2.1	18,517	79,311	20,595	3,044,713
FY81	62,548	51,236	5.3	1.2	11,755	85,585	20,572	2,310,013
FY82	131,899	76,882	12.6	1.7	10,451	79,600	12,349	5,848,012

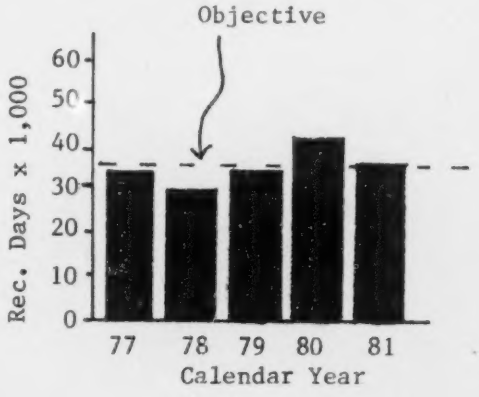
OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 38,344 PHEASANTS FOR HARVEST AT A RATE OF 3.0 BIRDS PER LICENSE HOLDER AND 0.9 BIRDS PER DAY OF HUNTING. THIS WILL PRODUCE 35,454 HUNTER RECREATION DAYS ANNUALLY.

During 1981, 42,588 pheasants were harvested at a rate of 3.5 birds per hunter. An average of 1.1 birds harvested per day of hunting resulted in a total of 37,373 days of pheasant hunting recreation. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.

Bird hunters expended an average of $27.04 per hunting day resulting in $1,010,451 in expenditures by pheasant hunters throughout the state.

A total of 12,191 hunters pursued this species during the 1981 season. License revenue attributable to this species resulted in $52,548 in income to the Department. Costs of pheasant management in Wyoming totaled $463,293 for all activities, resulting in a net cost of $410,745 for the program. The total cost to the Department was $10.88 and the return to the state's economy was $23.73 for each pheasant harvested. In 1981, 16,919 pheasants were raised and released from the Department's bird hatcheries.



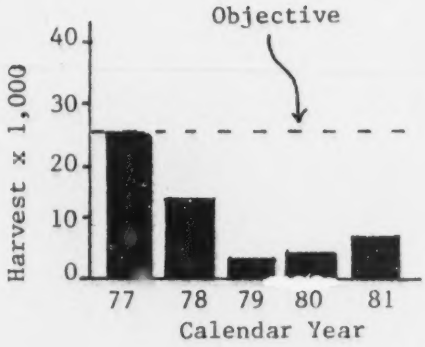


Five-year trends in the pheasant program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Animals/ Hunter	Animals/ Day	No. of Hunters	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	41,338	32,712	3.6	1.3	11,360	45,588	210,718	714,294
FY79	37,042	29,954	3.3	1.2	11,114	46,757	233,646	701,125
FY80	38,017	34,021	3.4	1.1	11,296	52,120	315,749	903,113
FY81	46,449	42,882	3.7	1.1	12,584	60,092	374,712	1,120,256
FY82	42,588	37,373	3.5	1.1	12,191	52,548	463,293	1,010,451

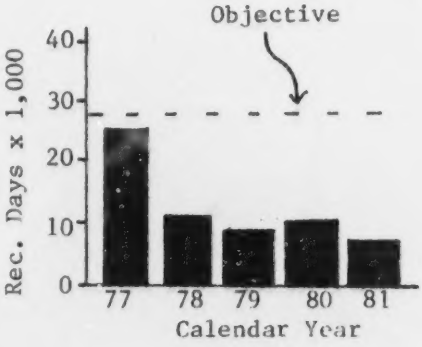
OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 17,382 CHUKAR AND 7,402 HUNGARIAN PARTRIDGE FOR HARVEST AT A RATE OF 0.9 BIRDS PER DAY. THIS WILL PRODUCE ANNUALLY 19,038 AND 8,225 HUNTER RECREATION DAYS, RESPECTIVELY.

During 1981, 4,657 chukar and 1,392 Hungarian partridges were harvested at a rate of 2.6 and 1.6 birds respectively per hunter. The average number of birds harvested per day was 1.1 and 0.5, respectively. This resulted in a total of 6,818 hunter recreation days of which 4,183 were for chukar and 2,635 for Hungarian partridge. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.



Bird hunters expended an average of $27.04 per hunting day and the 6,818 days spent by hunters in pursuit of partridge resulted in $184,338 in expenditures throughout the state.

A total of 2,660 hunters pursued partridge during the 1981 season. Of these, 1,805 and 855 hunters pursued chukar and Hungarian partridge, respectively. License revenue attributable to partridge hunting resulted in $9,592 in income to the Department. Costs of partridge management in Wyoming totaled $3,873 for all activities, resulting in a net revenue of $5,719 for the program. The total cost to the Department was 64¢ and the return to the state's economy was $30.47 for each partridge harvested. In 1981, 17 chukars were raised and released from the Department's bird hatcheries.

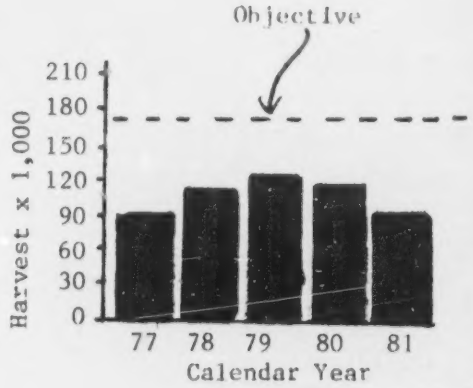


Five-year trends in the partridge program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Animals/ Hunter	Animals/ Day	No. of Hunters	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	28,235	24,062	4.1	1.17	6,948	22,829	8,948	523,816
FY79	13,572	13,618	3.1	1.00	4,437	23,438	4,364	321,349
FY80	3,481	7,610	1.4	0.46	2,425	26,127	5,749	204,706
FY81	4,865	8,490	1.9	0.57	2,579	30,123	23,112	221,794
FY82	6,049	6,818	2.3	0.89	2,660	9,592	3,873	184,338

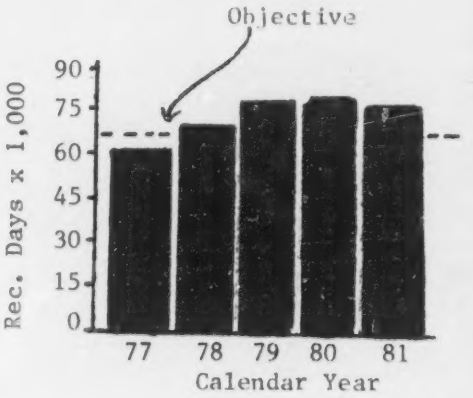
OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 126,825 SAGE, 4,983 SHARP-TAILED, 28,084 BLUE AND 10,230 RUFFED GROUSE FOR HARVEST AT A RATE OF 1.9, 1.0, 1.0 AND 1.0 BIRDS PER DAY, RESPECTIVELY. THIS WILL PRODUCE ANNUALLY 65,480, 5,059, 27,991 AND 10,376 HUNTER RECREATION DAYS, RESPECTIVELY.

During 1981, 78,897 sage, 3,495 sharp-tailed, 17,963 blue and 5,098 ruffed grouse were harvested at a rate of 4.0, 4.0, 2.6 and 2.3 birds per hunter, respectively. The average number of animals harvested per day was 1.7, 1.1, 0.9 and 0.7, respectively. This resulted in 47,509 sage, 3,306 sharp-tailed, 19,820 blue and 7,369 ruffed grouse hunter recreation. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.



Bird hunters expended an average of $27.04 per hunting day and the 78,004 recreation days spent by hunters in pursuit of grouse resulted in $2,108,988 in expenditures throughout the state.

A total of 29,648* hunters pursued these species during the 1981 season. License revenue attributable to these species resulted in $109,652 in income to the Department. Costs of grouse management in Wyoming totaled $191,230 for all activities, resulting in a net cost of $81,578 for the program. For each grouse harvested, the total cost to the Department was $1.81 and the return to the state's economy was $20.00.



Five-year trends in the grouse program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Animals/ Hunter	Animals/ Day	No. of* Hunters	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	96,917	65,932	3.8	1.4	25,203	87,324	114,358	1,438,113
FY79	116,077	73,349	4.4	1.6	26,497	88,797	114,803	1,718,731
FY80	129,786	82,991	4.2	1.6	31,231	98,982	156,643	2,197,575
FY81	114,469	83,442	3.7	1.4	30,933	114,123	173,782	2,179,852
FY82	105,453	78,004	3.6	1.4	29,648	109,652	191,230	2,108,988

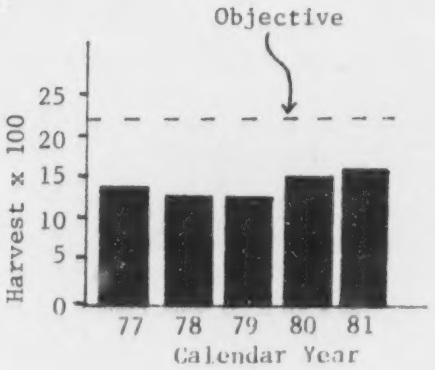
*Hunters pursuing more than one species of grouse are counted for each species hunted resulting in an unknown degree of multiple counting.

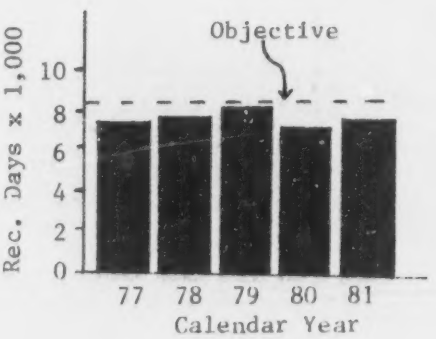
OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 2,230 TURKEYS FOR HARVEST AT A RATE OF 55.9 PERCENT SUCCESS AND 3.8 DAYS OF HUNTING PER BIRD TAKEN. THIS WILL PRODUCE 8,485 HUNTER RECREATION DAYS ANNUALLY.

During 1981, 1,678 turkeys were harvested at a hunter success rate of 51 percent. An average of 4.5 days of hunting per bird harvested resulted in a total of 7,489 days afield hunting turkey. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.

Turkey hunters expended an average of $66.30 per hunting day and the 7,489 days spent by hunters in pursuit of this species resulted in $495,138 in expenditures throughout the state.

A total of 3,283 turkey licenses were sold during the 1981 season. Sales of turkey licenses resulted in a total of $31,674 in revenue to the Department. Costs of turkey management in Wyoming totaled $68,932 for all activities, resulting in a net cost of $37,258 for the program. For each turkey harvested, the total cost to the Department was $41.08 and the return to the state's economy was $295.00.





Five-year trends in the turkey program in the state of Wyoming.

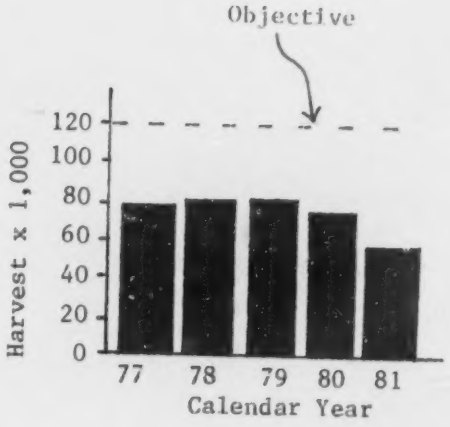
Fiscal Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	1,368	7,235	39%	5.3	3,548	26,890	37,783	289,696
FY79	1,314	7,758	43%	5.9	3,080	23,185	32,824	269,421
FY80	1,318	8,042	39%	6.0	3,454	26,690	40,259	341,668
FY81	1,490	6,826	45%	4.6	3,336	31,896	51,900	356,097
FY82	1,678	7,489	51%	4.5	3,283	31,674	68,932	495,138

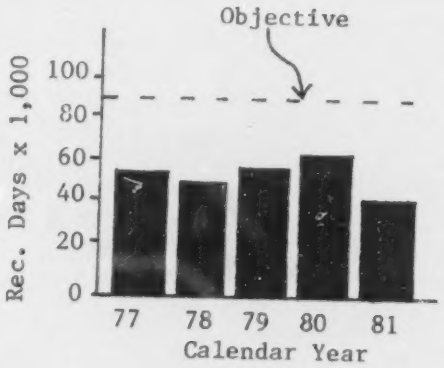
OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 122,890 DUCKS FOR HARVEST AT A RATE OF 1.3 DUCKS PER DAY. THIS WILL PRODUCE 92,500 HUNTER RECREATION DAYS.

During 1981, 60,768 ducks were harvested at a rate of 6.5 birds per hunter. An average of 1.44 birds harvested per day of hunting resulted in a total of 42,112 days of duck hunting recreation. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.

Bird hunters expended an average of $27.04 per hunting day, and the 42,112 days spent by hunters in pursuit of ducks resulted in $1,138,579 in expenditures throughout the state.

A total of 9,298 hunters pursued ducks during the 1981 season. License revenue attributable to this species resulted in $59,203 in income to the Department. Costs of duck management in Wyoming totaled $148,731 for all activities resulting in a net cost of $89,528 for the program. The total cost to the Department was $2.45 and the return to the state's economy was $18.74 for each duck harvested.





Five-year trends in the duck program in the state of Wyoming.

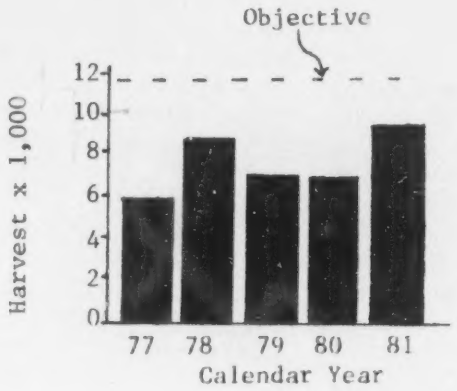
Fiscal Year	Harvest	Rec. Days	Animals/ Hunter	Animals/ Day	No. of Hunters	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	80,296	53,182	7.6	1.5	10,627	40,599	504,360	1,157,157
FY79	81,180	49,912	8.1	1.6	10,050	41,586	170,679	1,168,543
FY80	82,240	55,757	7.5	1.5	10,920	46,355	136,307	1,481,105
FY81	74,988	63,594	6.2	1.2	12,024	53,446	220,921	1,661,339
FY82	60,768	42,112	6.5	1.4	9,298	59,203	148,731	1,138,579

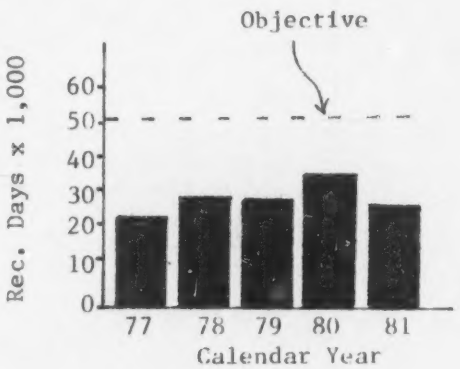
OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 11,850 GEESE FOR HARVEST AT A RATE OF 1.4 BIRDS PER LICENSE HOLDER AND 0.2 BIRDS PER DAY OF HUNTING. THIS WILL PRODUCE 53,250 HUNTER RECREATION DAYS ANNUALLY.

During 1981, 9,579 geese were harvested at a rate of 1.7 birds per hunter. An average of 2.86 days of hunting per goose harvested resulted in a total of 27,442 days of goose hunting recreation. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.

Bird hunters expended an average of $27.04 per hunting day and the 27,442 days spent by hunters in pursuit of geese resulted in $741,947 in expenditures throughout the state.

A total of 5,525 hunters pursued this species during the 1981 season. License revenue attributable to this species resulted in $38,579 in income to the Department. Costs of goose management in Wyoming totaled $392,416 for all activities, resulting in a net cost of $353,837 for the program. The total cost to the Department was $40.97 and the return to the state's economy was $77.46 for each goose harvested.



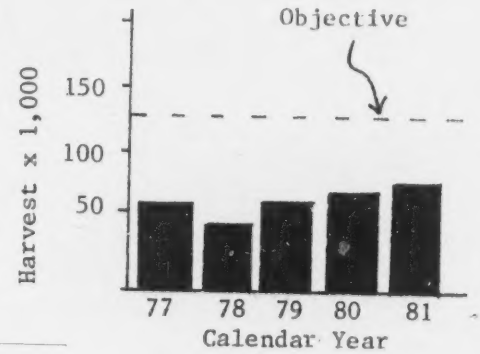


Five-year trends in the goose program in the state of Wyoming.

Fiscal Year	Harvest	Rec. Days	Animals/ Hunter	Animals/ Day	No. of Hunters	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	5,926	24,748	1.2	.24	5,075	20,034	463,930	538,102
FY79	8,732	27,975	1.4	.31	6,164	20,541	521,037	657,305
FY80	7,036	27,806	1.2	.25	5,699	22,897	650,795	734,532
FY81	6,997	36,561	1.0	.19	7,106	26,400	724,751	955,125
FY82	9,579	27,442	1.7	.35	5,525	38,579	392,416	741,947

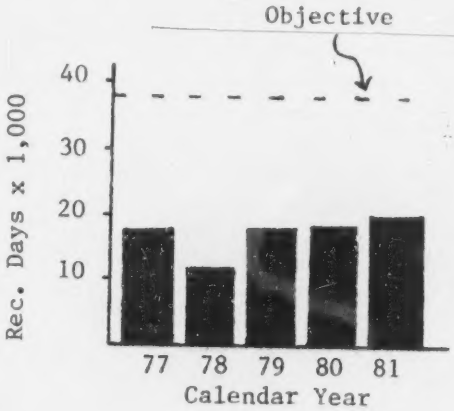
OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 119,860 DOVES AND 48 LITTLE BROWN CRANES FOR HARVEST AT A RATE OF 3.2 BIRDS PER DAY. THIS WILL PRODUCE ANNUALLY 36,750 AND 368 HUNTER RECREATION DAYS, RESPECTIVELY.

During 1981, 72,122 mourning dove and 18 little brown cranes were harvested at a rate of 11.8 and 0.4 birds per hunter, respectively. An average of 3.4 mourning doves and 0.1 cranes were harvested per day resulting in 21,309 and 182 hunter recreation days, respectively. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, etc. At present, no information is available concerning rail, snipe and coot harvests.



Bird hunters expended an average of $27.04 per hunting day and the 21,491 days spent by hunters in pursuit of doves and cranes resulted in $581,050 in expenditures throughout the state.

A total of 6,147 hunters pursued cranes and doves during the 1981 season. License income attributable to these species resulted in $30,186 in income to the Department. Management costs for this program in Wyoming totaled $103,022 for all activities resulting in a net cost of $72,836. The total cost to the Department was $1.43 and the return to the state's economy was $8.05 for each bird harvested. The cost to the Department is a maximal figure as rails, snipe and coots are not included in the harvest.



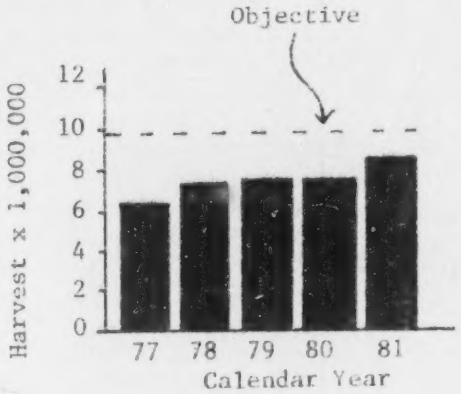
Five-year trends in the other migratory game birds program in the state of Wyoming.

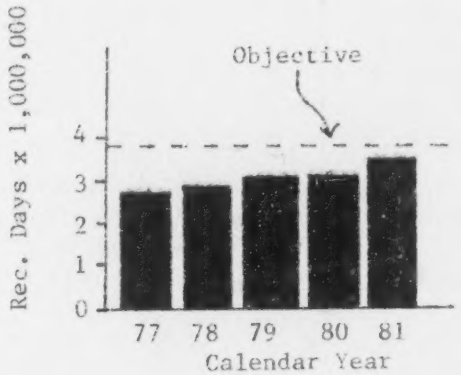
Fiscal Year	Harvest	Rec. Days	Animals/ Hunter	Animals/ Day	No. of Hunters	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	57,226	17,903	11.6	3.2	4,922	17,864	29,369	390,481
FY79	42,250	12,941	10.2	3.3	4,141	18,315	38,345	301,873
FY80	59,310	18,810	10.9	3.2	5,458	20,416	106,718	499,723
FY81	68,636	19,597	11.4	3.5	6,041	23,538	13,476	511,955
FY82	72,140	21,491	11.7	3.4	6,147	30,186	103,022	581,050

OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO PROVIDE AT LEAST 9,875,335 FISH FOR HARVEST WHICH MEETS THE STATEWIDE AVERAGE STANDARDS FOR SIZE UNDER THE APPROPRIATE MANAGEMENT CONCEPTS AT AN AVERAGE CATCH OF 2.5 FISH PER DAY. THIS WILL PROVIDE 3,950,134 FISHERMAN RECREATION DAYS.

During 1981, an estimated 8,617,578 fish were harvested from Wyoming waters. An average catch of 2.5 fish per fisherman recreation day resulted in 3,447,031 days spent afield in pursuit of this sport. No data are available regarding the extent to which this resource is used nonconsumptively.

Anglers expended approximately $31.20* per fishing day for a total of $107,539,592* in expenditures throughout the state. A total of 281,146 fishing licenses were sold during the 1981 season. License sales resulted in $2,642,072 in revenue to the Department. Costs of sport fisheries management in Wyoming totaled $7,594,102 for all activities, resulting in a net cost of $4,952,030 for the program. The total cost to the Department was 88¢ and the return to the state's economy was $12.48 for each fish harvested.





Five-year trends in the sport fisheries program in the state of Wyoming.

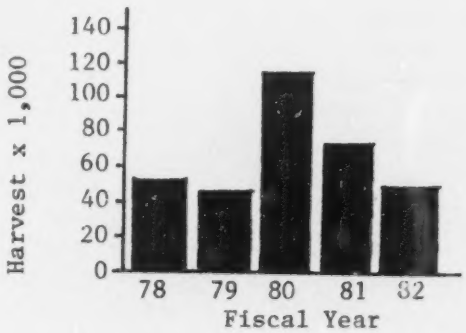
Fiscal Year	Harvest	Rec. Days	Fish/ Day	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Fisherman Expend.
FY78	6,433,893	2,573,557	2.5	296,075	1,663,143	3,625,817	56,217,810
FY79	7,409,420	2,963,768	2.5	308,552	1,759,872	3,941,426	65,104,609
FY80	7,544,603	3,017,841	2.5	293,636	1,693,196	4,772,646	75,069,077
FY81	7,554,910	3,021,964	2.5	263,194	2,454,177	6,050,413	83,187,084
FY82	8,617,578	3,447,031	2.5	281,146	2,642,072	7,594,102	107,539,592

*Fisherman expenditures, recreation days and expenditures per day are not directly comparable due to different methodologies being used in the two reports from which these calculations were taken.

OBJECTIVES: THE STATEWIDE OBJECTIVE FOR THE PROGRAM IS TO DETERMINE THE POPULATION STATUS AND HARVEST POTENTIAL FOR EACH SPECIES.

During fiscal year 1982, an estimated 1,042 bobcat, 5,522 beaver, 5,772 coyote, 4,681 fox, 835 mink, 216 weasel, 17,872 muckrat, 2,758 raccoon, 1,967 badger, 305 marten, 4,600 skunk and 108 swift fox were harvested. No data are available regarding consumptive recreation days furnished by the resource or by nonconsumptive endeavors as observation, photography, nature study, etc.

A total of 1,777 trapping, 62 fur dealer licenses and 7,063 beaver tags were sold during 1981. Sales of trapping, fur dealer licenses and beaver tags resulted in $44,062 in revenue to the Department. Furs trapped in Wyoming in 1981 were valued at approximately $1,480,667 and trappers expended approximately $19.50 per trapping day[1]. Costs of furbearer management in Wyoming totaled $82,367 for all activities resulting in a net cost of $38,305 for the program. The total cost to the Department was $1.80 and the return to the state's economy was at least $124 for each furbearer harvested.



Five-year trends in the furbearer program in the state of Wyoming.

Fiscal Year	Harvest	Days	Harvest/ Lic. Holder	Animals/ Day	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs	Benefits to the State ($)[2]
FY78	52,775	266,488	41.4	0.2	1,365	13,969	29,885	---
FY79	44,674	167,791	20.5	0.3	1,271	12,887	28,630	---
FY80	113,156	473,744	59.5	0.2	2,174	21,149	80,026	---
FY81	75,397	357,831	42.4	0.2	1,902	47,704	80,421	6,462,428
FY82	45,678	216,768	25.7	0.2	1,777	44,062	82,367	5,184,681

[1]Although daily expenditure estimates are available for resident trappers only, nonresident expenditures are assumed to be similar.

[2]Includes estimated resident and nonresident trapper expenditures and value of furs taken.

OBJECTIVE: THE STATEWIDE OBJECTIVE FOR THE PROGRAM IS TO COMPLETE AN INITIAL ASSESSMENT OF COMMERCIAL FISHERIES POTENTIAL FOR THE MAJOR WATERS OF THE STATE.

During 1981, 31 fishing preserve, 3 commercial fish hatchery, 226 seining and 42 live bait dealer licenses were sold. License sales resulted in a total of $6,215 in revenue to the Department. Costs of commercial fisheries management in Wyoming totaled $86,623 for all activities resulting in a net cost of $80,408 for the program. The commercial fisheries program at present consists of a research project and the licensing of several activities. There were 2 commercial fishing operations active in Wyoming during 1981.

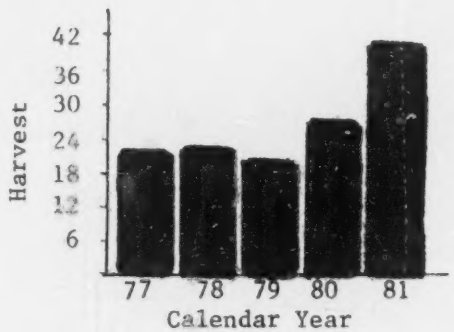
Five-year trends in the commercial fisheries program in the state of Wyoming.

Fiscal Year	Yield (lbs) Commercial Fish	Minnow Harvest Bait Dealers	Minnow Harvest Seining Permits	Rec. Days Fishing Preserves	Lic. Sold	Lic. Rev. ($)	Mgmt. Costs
FY78	---	---	---	---	227	4,360	141,641
FY79	---	---	---	---	234	4,460	145,249
FY80	---	---	---	---	260	4,635	166,883
FY81	---	---	---	---	249	5,270	248,589
FY82	---	---	---	---	302	6,215	86,623

OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO INITIATE AND MAINTAIN A CURRENT STATUS AND INVENTORY OF ALL RAPTORS AND ESTIMATE THE RECREATIONAL AND ESTHETIC IMPORTANCE OF THIS SEGMENT OF THE WILDLIFE RESOURCE.

During 1981, 40 raptors were harvested at a success rate of 51.9%. No data are available regarding recreation days spent capturing and hunting with falcons, nor are data available on the number of days spent in such nonconsumptive endeavors as observation, photography, nature study, etc.

A total of 50 falcon capture permits and 19 hunt with falcon permits were sold during the 1981 season. Sales of licenses resulted in $3,655 in revenue to the Department. Costs of raptor management in Wyoming totaled $117,176 for all activities, resulting in a net cost of $113,521 for the program. The total cost to the Department was $2,929.40 for each falcon captured.



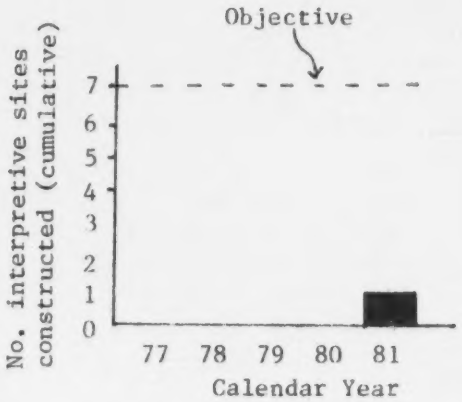
Five-year trends in the raptor program in the state of Wyoming

Fiscal Year	Harvest	Rec. Days	Success*	Days/ Animal	Lic.** Sold	Lic. Rev. ($)	Mgmt. Costs	Hunter ($) Expend.
FY78	22	--	52.3%	--	39	1,925	36,532	--
FY79	23	--	52.2%	--	45	2,130	65,014	--
FY80	20	--	50.0%	--	47	2,125	79,375	--
FY81	27	--	36.9%	--	67	3,390	71,001	--
FY82	40	--	51.9%	--	69	3,655	117,176	--

* Based on capture permits issued.
** Includes permits to hunt with falcon.

OBJECTIVES: THE STATEWIDE OBJECTIVES FOR THE PROGRAM ARE TO MEET THE OBJECTIVES AS STATED UNDER LICENSED USE PROGRAMS WHERE APPLICABLE, DEVELOP AT LEAST 7 ADDITIONAL, INTERPRETIVE SITES FOR THE NONCONSUMPTIVE USE OF WILDLIFE IN ITS NATURAL HABITAT, INITIATE AND MAINTAIN A CURRENT STATUS AND INVENTORY OF ALL NONGAME WILDLIFE AND ESTIMATE THE RECREATIONAL AND ESTHETIC IMPORTANCE OF THIS SEGMENT OF THE WILDLIFE RESOURCE.

During 1981, one interpretive site at Sinks Canyon State Park was developed under this program. Costs of nongame management in Wyoming totaled $188,374 for all activities and species. No data are available regarding days spent in such nonconsumptive endeavors as observation, photography, nature study, etc. The Department's fish hatcheries, Sybille Game Research Unit and Sinks Canyon are considered to be existing interpretive sites.



Five-year trends in the nonlicensed uses of wildlife program in the state of Wyoming.

Fiscal Year	Recreation Days	Management Costs	Expenditures in State
FY78	--	342,952	--
FY79	--	370,142	--
FY80	--	422,923	--
FY81	--	401,998	--
FY82	--	188,374	--

FIVE-YEAR HARVEST COMPARISON

Table 1 . Five-year Comparison of Wildlife Harvest by Species.

Species	1977	1978	1979	1980	1981
BIG GAME					
Antelope	58,858	58,132	44,616	47,994	67,801
Deer	79,687	67,403	61,243	61,100	66,090
Mule Deer	68,638	59,605	53,791	54,086	58,804
Whitetail Deer	11,049	7,798	7,452	7,014	7,286
Elk	21,784	13,507	18,580	17,428	18,713
Moose	1,697	1,503	1,448	1,413	1,369
Bighorn Sheep	147	161	167	182	174
Rocky Mtn. Goat	4	3	4	7	7
*Black Bear	268	342	311	408	236
Spring	117	159	125	201	113
Fall	151	183	186	207	123
Grizzly Bear	---	---	---	---	---
Mountain Lion	8	10	13	18	21
UPLAND GAME					
*Ducks	80,296	81,180	82,240	74,988	60,768
*Geese	5,926	8,732	7,036	6,997	9,579
Pheasants	41,338	37,042	38,017	46,669	42,588
*Chukar Partridge	20,665	9,300	2,271	4,118	4,657
*Hungarian Partridge	7,570	4,272	1,210	747	1,392
Blue Grouse	15,243	19,135	23,960	19,944	17,963
Ruffed Grouse	7,099	7,031	9,333	5,215	5,098
Sage Grouse	70,783	85,065	93,208	85,254	78,897
Sharptail Grouse	3,792	4,846	3,285	4,056	3,495
*Cottontail Rabbit	246,714	317,205	151,926	56,667	123,759
*Turkey	1,368	1,314	1,318	1,490	1,678
Spring	360	342	378	440	483
Fall	1,008	972	940	1,050	1,195
Mourning Dove	57,207	42,231	59,310	68,636	72,122
*Snowshoe Hare	3,164	7,332	4,458	2,580	3,226
*Squirrel	4,092	7,659	7,041	3,301	4,914
Little Brown Crane	19	19	0	0	18
*FISH	6,433,893	7,397,279	7,544,602	7,390,217	8,617,578
*RAPTORS	28	26	42	76	40
Prairie Falcon	20	16	20	31	19
Sparrow Hawk (Kestral)	1	0	2	3	2
Red-tailed Hawk	1	3	3	6	2
Goshawk	3	3	10	29	9
Sharp-skinned Hawk	0	0	0	0	0
Rough-legged Hawk	0	2	1	0	0
Cooper's Hawk	1	1	0	0	0
Gyrfalcon	1	0	2	1	2
Pigeon Hawk (Merlin)	1	1	4	6	5
Ferruginous Hawk	0	0	0	0	1

*Harvest based on calendar year

LICENSE SALES

FIVE-YEAR COMPARISON

STATEWIDE FIVE-YEAR COMPARISON OF LICENSE SALES

TYPE OF LICENSE	1977	1978	1979	1980	1981
Resident Deer ($10)	63,507	75,321	78,406		
Resident Deer ($15)				76,203	78,335
Add'l Resident Deer ($10)	219	263	88		
Add'l Resident Deer ($15)				437	1,032
Add'l Res. Deer/Half Price ($5)	1,098	112			
Add'l Res. Deer/Half Price ($7.50)				381	722
Depredation Resident Deer ($10)					
Depredation Resident Deer ($15)					
Military Resident Deer ($10)	492	485	480		
Military Resident Deer ($15)				394	401
Pioneer Deer ($1)	2,683	2,567	2,316		
Pioneer Deer ($2)				1,767	1,554
Add'l Pioneer Deer ($1)	11	3	1		
Add'l Pioneer Deer ($2)				18	14
TOTALS	68,010	78,751	81,291	79,200	82,058
Nonresident Deer ($50)	40,509	35,895	34,374		
Nonresident Deer ($100)				30,493	32,320
Add'l Nonres. Deer ($50)	1,269	1,235	547		
Add'l Nonres. Deer ($100)				108	528
Add'l Nonres. Deer/Half Price ($25)	600	24			
Add'l Nonres. Deer/Half Price ($50)				257	554
Depredation Nonres. Deer ($50)					
Depredation Nonres. Deer ($100)					
TOTALS	42,378	37,154	34,291	30,858	33,402
TOTAL DEER LICENSES	110,388	115,905	116,212	110,058	115,460
Res. Elk & Black Bear ($15)	53,284	59,999	62,311		
Res. Elk & Black Bear ($25)				55,177	57,099
Depredation Resident Elk ($15)	5	4			
Depredation Resident Elk ($25)					
Pioneer Elk ($5)	1,738	1,671	1,507	1,117	954
Military Res. Elk & Black Bear ($15)	219	250	228		
Military Res. Elk & Black Bear ($25)				153	156
TOTALS	55,246	61,924	64,046	56,447	58,209
Nonresident Elk & Fishing ($125)	6,083	6,080	6,056		
Nonresident Elk & Fishing ($250)				6,086	5,996
TOTALS	6,083	6,080	6,056	6,086	5,996
TOTAL ELK LICENSES	61,329	68,004	70,102	62,533	64,205

STATEWIDE FIVE-YEAR COMPARISON OF LICENSE SALES

TYPE OF LICENSE	1977	1978	1979	1980	1981
Resident Antelope ($10)	19,820	20,967	19,949		
Resident Antelope ($15)				24,627	27,921
Add'l Res. Antelope ($10)	3,215	3,752	3,892		
Add'l Res. Antelope ($15)				4,448	5,451
Add'l Res. Antelope/Half Price ($5)	2,063	4,134	2,333		
Add'l Res. Antelope/Half Price ($7.50)				8,083	15,137
Pioneer Antelope ($1)	1,556	1,428	1,284		
Pioneer Antelope ($2)				1,082	980
Add'l Pioneer Antelope ($1)	112	148	122		
Add'l Pioneer Antelope ($2)				148	273
Depredation Res. Antelope ($10)	415	6	37		
Depredation Res. Antelope ($15)					74
TOTALS	27,181	30,435	27,617	38,388	49,836
Nonresident Antelope ($50)	32,777	28,074	19,208		
Nonresident Antelope ($100)				16,059	21,772
Add'l Nonres. Antelope ($50)	4,370	4,463	4,176		
Add'l Nonres. Antelope ($100)				747	1,216
Add'l Nonres. Antelope/Half Price ($25)	1,845	3,489	2,207		
Add'l Nonres. Antelope/Half Price ($50)				1,715	4,503
Depredation Nonres. Antelope ($50)	10				
Depredation Nonres. Antelope ($100)					
TOTALS	39,002	26,026	25,591	18,521	27,491
TOTAL ANTELOPE LICENSES	66,183	66,461	53,208	56,909	77,327
Resident Moose ($25)	1,516	1,432	1,391		
Resident Moose ($50)				1,342	1,333
Depredation Resident Moose ($25)			3		
Depredation Resident Moose ($50)				24	
TOTALS	1,516	1,432	1,394	1,366	1,333
Nonresident Moose ($125)	378	357	345		
Nonresident Moose ($300)				323	280
Depredation Nonres. Moose ($125)			1		
Depredation Nonres. Moose ($300)					
TOTALS	378	357	346	323	280
TOTAL MOOSE LICENSES	1,894	1,789	1,740	1,689	1,613
Resident Sheep ($30)	290	285	289		
Resident Sheep ($50)				273	265
Nonresident Sheep ($150)	99	98	98		
Nonresident Sheep ($400)				91	87
TOTAL SHEEP LICENSES	389	383	387	364	352

STATEWIDE FIVE-YEAR COMPARISON OF LICENSE SALES

TYPE OF LICENSE	1977	1978	1979	1980	1981
Resident Mountain Goat ($30)	3	3	3		
Resident Mountain Goat ($50)				6	6
Nonresident Mountain Goat ($150)	1	1	1		
Nonresident Mountain Goat ($500)				2	2
TOTAL MOUNTAIN GOAT LICENSES	4	4	4	8	8
Resident Black Bear ($5)	45	33	44		
Resident Black Bear ($10)				715	912
Mil. Resident Black Bear ($5)		3			
Mil. Resident Black Bear ($10)				7	3
TOTALS	45	36	44	722	915
Nonresident Black Bear ($30)	1,010	1,210	1,287		
Nonresident Black Bear ($50)				866	889
TOTALS	1,010	1,210	1,287	866	889
TOTAL BLACK BEAR LICENSES	1,055	1,245	1,331	1,588	1,804
Resident Mountain Lion ($20)	43	62	89	85	127
Nonresident Mountain Lion ($100)	1	2	1	5	7
TOTAL MOUNTAIN LION LICENSES	44	64	90	90	134
Resident Spring Male Turkey ($5)	812	807	887		
Resident Spring Male Turkey ($6)				871	828
Resident Fall Turkey ($5)	2,126	1,754	1,939		
Resident Fall Turkey ($6)				1,970	1,956
TOTALS	2,938	2,561	2,826	2,841	2,784
Nonres. Spring Male Turkey ($20)	145	154	167		
Nonres. Spring Male Turkey ($30)				140	163
Nonres. Fall Turkey ($20)	465	365	461		
Nonres. Fall Turkey ($30)				355	336
TOTALS	610	510	628	495	499
TOTAL TURKEY LICENSES	3,548	3,080	3,454	3,336	3,283

STATEWIDE FIVE-YEAR COMPARISON OF LICENSE SALES

TYPE OF LICENSE	1977	1978	1979	1980	1981
Resident Game Bird ($5)	29,291	30,367	33,218		
Resident Game Bird ($6)				33,916	33,610
Military Resident Game Bird ($5)	128	140	170		
Military Resident Game Bird ($6)				172	158
TOTALS	29,419	30,507	33,388	34,088	33,768
Nonresident Game Bird ($25)	3,456	2,475	3,977		
Nonresident Game Bird ($30)				3,417	3,217
3-Day Special Bird ($5)	81	104	101		
3-Day Special Bird ($6)				109	107
TOTALS	3,537	3,579	3,078	3,526	3,324
TOTAL GAME BIRD LICENSES	32,956	34,086	37,466	37,614	37,092
Resident Small Game ($3)	18,003	22,234	16,617		
Resident Small Game ($5)				13,203	11,968
Military Resident Small Game ($3)	266	306	310		
Military Resident Small Game ($5)				194	157
TOTALS	18,269	22,540	16,927	13,397	12,125
Nonresident Small Game ($10)	2,957	3,705	2,854		
Nonresident Small Game ($25)				744	759
TOTALS	2,957	3,705	2,854	744	759
TOTAL SMALL GAME LICENSES	21,226	26,245	19,781	14,141	12,884
Resident Fishing ($5)	96,126	103,398	110,729		
Resident Fishing ($7.50)				113,718	122,632
Military Resident Fishing ($5)	872	894	910		
Military Resident Fishing ($10)				807	826
Resident 5-Day Fishing ($3)	194	314	303		
Resident Youth Fishing ($2)	12,987	13,270	13,525		
Resident Youth Fishing ($3)				13,854	14,608
Underwater Fishing ($3)	21	59	72		
Underwater Fishing ($5)				59	53
TOTALS	110,200	117,935	125,539	128,438	138,119
Nonresident Fishing ($25)	12,236	13,568	13,911		
Nonresident Fishing ($30)				15,323	17,663
Tourist 5-Day Fishing ($5)	161,442	169,867	147,892		
Tourist 5-Day Fishing ($10)				104,768	109,143
Tourist Youth 5-Day Fishing ($2)	5,108	6,388	5,512		
Tourist Youth 5-Day Fishing ($3)				14,665	16,221
TOTALS	179,615	190,617	168,099	134,756	143,027
TOTAL FISHING LICENSES	289,815	308,522	293,638	263,194	281,146

STATEWIDE FIVE-YEAR COMPARISON OF LICENSE SALES

TYPE OF LICENSE	1977	1978	1979	1980	1981
Reciprocity Stamps ($3)	6,260	5,290	4,367	3,686	3,689
TOTAL RECIPROCITY STAMPS	6,260	5,290	4,367	3,686	3,689
Resident Archery ($3)	3,568	4,578	5,784		
Resident Archery ($5)				5,867	6,261
Nonresident Archery ($5)	824	930	777		
Nonresident Archery ($10)				693	888
TOTAL ARCHERY LICENSES	4,392	5,508	6,561	6,560	7,149
Wyoming Game Tags ($1)	545	453	297		
Wyoming Game Tags ($2)				330	94
Interstate Game Tags ($1)	8,781	8,137	7,195		
Interstate Game Tags ($2)				7,618	8,109
Beaver Tags ($.75)	6,352	4,443	7,118		
Beaver Tags ($.50)				11,377	7,063
TOTAL TAGS	15,678	13,033	14,610	19,325	15,266
Resident Guide ($20)	1,101	1,045	1,020		
Resident Guide ($25)				1,092	1,079
Big Game Animal Outfitter ($50)	287	294	282		
Big Game Animal Outfitter ($75)				278	291
Deer-Antelope Outfitter ($25)	68	59	48		
Deer-Antelope Outfitter ($35)				48	55
Fishing Outfitter ($25)	150	150	144		
Fishing Outfitter ($35)				145	152
TOTAL OUTFITTER LICENSES	1,606	1,548	1,494	1,563	1,577
Resident Fur Bearing Trapping ($5)	1,365	1,231	2,051		
Resident Fur Bearing Trapping ($20)				1,609	1,464
Resident Youth Fur Bearing Trapping ($5)				227	240
Nonres. Fur Bearing Trapping ($25)		40	123		
Nonres. Fur Bearing Trapping ($100)				66	73
TOTAL FUR BEARING TRAPPING LICENSES	1,365	1,271	2,174	1,902	1,777

STATEWIDE FIVE-YEAR COMPARISON OF LICENSE SALES

TYPE OF LICENSE	1977	1978	1979	1980	1981
Res. License to Capture Falcon ($20)	14	13	12	20	18
Nonres. License to Capture Falcon ($100)	16	18	18	29	32
License to Hunt With Falcon ($5)	9	14	17	18	19
Lic. to Capture Fur Bearing Animals ($5)		1	1	4	4
Resident Fur Dearler ($20)	44	45	54		
Resident Fur Dealer ($25)				44	46
Nonres. Fur Dealer ($100)	14	15	14	10	16
Taxidermist ($25)	52	52	52		
Taxidermist ($30)				53	58
Game Bird Farm ($40)	20	25	25		
Game Bird Farm ($50)				29	26
Fishing Preserve ($50)	30	34	32	29	31
Commercial Fish Hatchery ($75)	7	5	4	3	3
Lic. to Sein or Trap Fish ($10)	159	166	191		
Lic. to Sein or Trap Fish ($15)				183	226
Lic. to Deal in Live Bait ($25)	29	29	33	34	42
GRAND TOTAL LICENSES	618,526	652,885	627,072	663,763	625,287

E C O N O M I C S

Table 1. Estimates of 1981 Expenditures in Wyoming by Hunters and Fishermen*.

License	License Sales	Recreation Days	Per Day Expend.	Total Expend.	Expend. per License Holder
Antelope	77,327	123,101	120.41	14,823,181	191.69
Resident	49,836	68,145	79.87	5,442,741	109.21
Nonresident	27,491	54,956	170.69	9,380,440	341.22
Deer	115,460	426,265	63.07	26,882,626	232.83
Resident	82,058	298,307	42.65	12,722,794	155.05
Nonresident	33,402	127,958	110.66	14,159,832	423.92
Elk	64,205	346,190	73.46	25,431,524	396.10
Resident	58,209	310,197	59.73	18,528,067	318.30
Nonresident	5,996	35,993	191.80	6,903,457	1,151.34
Moose	1,613	7,352	95.32	700,778	434.46
Resident	1,333	6,008	77.71	466,882	350.25
Nonresident	280	1,344	174.03	233,896	835.34
Sheep	352	3,505	138.28	484,674	1,376.91
Resident	265	2,748	89.77	246,688	930.90
Nonresident	87	757	314.38	237,986	2,735.47
Black Bear	1,804	37,312	12.03	448,853	248.81
Resident	915	19,029	4.91	93,432	102.11
Nonresident	889	18,283	19.44	355,421	399.80
Birds & Waterfowl	37,092	213,240	27.04	5,765,352	155.43
Resident	33,768	194,048	26.19	5,082,117	150.50
Nonresident	3,324	19,192	35.60	683,235	205.55
Turkey	3,283	7,468	66.30	495,138	150.82
Resident	2,784	6,161	54.32	334,665	120.21
Nonresident	499	1,307	122.78	160,473	321.59
Small Game	12,884	76,882	76.06	5,848,012	453.90
Resident	12,125	72,269	77.08	5,570,494	459.42
Nonresident	759	4,613	60.16	277,518	365.64
Fishing	281,146	3,447,031	31.20	107,539,592	382.50
Resident	138,119	2,700,227	32.44	87,595,364	634.20
Nonresident	17,663	321,820	21.63	6,960,967	394.10
Tourist 5-Day	125,364	424,934	30.55	12,983,261	103.56
Trapping					
Resident	1,704	36,295	19.50	707,752	415.35
TOTAL	596,870	4,724,641	40.03	189,127,482	316.87

*This update is based on the 1980 Expenditure Estimates, Planning Section, July 9, 1982, whereby the Per Day Expenditures are adjusted for inflation (Consumer Price Index) at the rate of 1.08; 1981 Annual Report of Big Game Harvest; and the 1981 License Sales Summary.

F I S H E R I E S

Table 1. Estimated Supply of Fishing Recreation by Drainage and Water Types, 1979 Fishing Pressure and 1983 Objectives for the State of Wyoming.

Drainage - Water Type	Total Estimated Supply (Fisherman Days)	Est. Supply with Guaranteed Access (Fisherman Days)	Est. Pressure (Fisherman Days)	1983 Objectives (Fisherman Days)
Snake River	1,129,077	1,086,858	314,019±12,914	415,045
Streams	315,361	274,068	233,558±11,890	265,629
Standing Waters	813,716	812,790	80,461± 7,641	149,416
Wind-Big Horn River	2,119,424	1,859,792	876,313±19,962	785,996
Streams	681,869	487,801	504,065±16,559	455,878
Standing Waters	1,437,555	1,371,991	372,248±15,018	330,118
Powder-Tongue River	520,944	363,888	378,705±13,321	360,775
Streams	196,552	100,610	235,404±11,889	202,034
Standing Waters	324,392	263,278	143,301± 9,278	158,741
Green River	1,636,850	1,356,530	730,209±19,737	940,228
Streams	451,615	233,713	359,145±15,346	554,735
Standing Waters	1,185,235	1,122,817	371,064±15,668	385,493
Platte River	2,126,564	1,556,512	1,356,796±26,619	1,448,090
Streams	585,552	227,830	559,407±20,867	810,931
Standing Waters	1,541,012	1,328,682	797,389±21,888	637,159
STATE TOTAL	7,532,859	6,223,580	3,665,042±34,841	3,950,134
Streams	2,230,949	1,324,022	1,891,579±28,205	2,289,207
Standing Waters	5,301,910	4,899,558	1,764,463±27,696	1,660,927

Table 2. Fish Egg Record - July 1, 1981 through June 30, 1982

Species	Source	Number Taken	By Species	Eggs Shipped Out
Rainbow	Wigwam	6,282,242	6,282,242	176,596 Nebraska, Commercial
				135,168 Nebraska, State
				1,026,076 Nevada, State
				230,400 Colorado, State
				598,916 Colorado, Commercial
	Boulder	3,875,758		55,296 Montana, Federal
	Kemmerer City Reservoir	744,206		124,950 Nebraska, State
				100,016 Colorado, Commercial
	Lake DeSmet	3,809,661		444,585 Wyoming, Federal
				25,536 Wisconsin, Federal
				91,808 Tennessee, Federal
				115,232 North Dakota, Federal
				101,659 South Dakota, Federal
				225,456 Colorado, Commercial
	Eagle Lake	25,798	8,455,433	
Brook	Soda Lake	656,178		120,888 Colorado, Commercial
	Daniel	169,724	825,902	322,197 Wyoming, Commercial
Cutthroat	Utah	80,614		
	Lake of the Woods	188,464		
	Snake River			7,884 Colorado, State
				816,584 Idaho, State
	Yellowstone	792,235		9,828 Wyoming, Federal
	Auburn	5,338,611	6,399,924	
				732,044 New Mexico, State
				75,900 Arkansas, State
				1,309,032 Wyoming, Commercial
				140,160 Wyoming, Federal
Machinaw	Story	1,067,440	1,067,440	42,364 Wisconsin, State
				197,540 Utah, State
				120,190 Montana, State
				332,248 Minnesota, Commercial
Golden	Daniel			14,059 Washington, State
Kokanee	Sheep Creek	195,008		
	Green River	176,880	371,888	
Grayling	Daniel			124,800 Idaho, State
	Meadow Lake	562,900	562,900	41,600 Washington, State
Splake	Story	147,752	147,752	
Walleye	Keyhole	8,960,708		
	Glendo	9,740,690	18,701,388	
TOTALS		42,814,879	42,814,879	7,732,116

Table 3. Fish Hatchery Net Production (Lbs.) - July 1, 1981 through June 30, 1982

Station	On Hand June 30, 1982	Planted	Transferred Out	On Hand July 1, 1981	Transferred In	Net Production
Auburn	24,239	30,925	299	19,874	220	35,369
Boulder	17,163	31,235	—	15,668	2,937	29,793
Clark's Fork	27,143	128,195	7,485	34,551	682	127,590
Como Bluff	2,829	16,113	792	1,248	386	18,100
Daniel	6,844	11,853	450	7,543	—	11,605
Dubois	11,477	14,477	1,387	7,813	717	18,812
Speas	23,370	149,667	766	34,081	4,056	135,666
Story	19,422	36,737	3,761	15,475	8,123	36,321
Tensleep	2,978	15,305	3,701	3,552	604	17,828
Tillett	20,564	28,712	72	13,685	3,243	32,420
Wigwam	55,176	90,462	2,255	65,297	1,574	81,022
Totals	211,206	553,681	20,968	218,787	22,542	544,526

Table 4. Fish Hatchery Production and Cost Report - July 1, 1981 through June 30, 1982

Station	# Plant. & Trans. Out	Lbs. Plant. & Trans. Out	Lbs. Produced	Operation/ Maintenance Cost ($)	6/30/82	6/30/81	6/30/80	6/30/79	Food Consump. Cost ($)	Cost Per. Lb. ($)
Auburn	970,949	31,225	36,370	110,289	3.03	3.27	3.14	2.77	12,840	.35
Boulder	1,181,592	31,235	29,793	117,346	3.93	4.17	3.18	3.69	12,728	.42
Clark's Fork	2,100,786	135,680	127,590	205,715	1.61	1.95	1.36	1.08	40,741	.31
Como Bluff	813,949	16,905	18,100	132,340	7.31	6.50	5.22	2.77	6,312	.34
Daniel	949,538	12,303	11,605	164,161	14.14	7.33	5.77	3.93	6,224	.53
Dubois	639,973	15,864	18,812	123,684	6.57	4.93	4.49	3.83	6,333	.33
Speas	7,651,502	150,434	135,666	189,895	1.39	1.65	1.41	1.18	45,075	.33
Story	1,270,453	57,159	37,321	99,783	2.67	2.33	2.43	2.65	12,540	.33
Tensleep	6,776,559	18,283	17,828	115,812	6.49	7.19	5.39	4.18	6,915	.38
Tillett	57,492	28,784	32,420	115,830	3.57	2.49	1.69	2.67	11,551	.35
Wigwam	1,317,280	92,717	81,022	165,625	2.04	1.54	1.16	1.13	29,819	.36
Totals	23,730,589	590,589	546,527	1,540,480	2.81	2.70	2.11	1.93	192,078	.34

Table 5. Record of Fish Planting (By County) - July 1, 1981 through June 30, 1982

County	Brook		Brown		Cutthroat		Machinaw		Rainbow		Miscellaneous		Total	
	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.
Albany	28,590	159	121,768	2,693	49,780	655			1,272,192	39,675	500[17]	500		
											40[12]	8	1,472,870	43,690
Big Horn					145,312	4,898			42,232	17,767			187,544	22,665
Campbell									15,963	2,812			15,963	2,812
Carbon					59,057	23,290	135	432	722,512	70,814			781,704	94,536
Converse									4,668	3,128			4,668	3,128
Crook	1,402	44							15,533	3,906	1,500[2]	44		
											80[7]	16		
											80[10]	6		
											4,997,624[5]	79		
											4,785[11]	1,295		
											1,469[17]	998		
											190,100[6]	619		
											400[13]	100		
											1,000[14]	2	5,213,973	7,108
Fremont	12,652	113	56,543	2,765	81,980	1,534			101,471	30,409	2,220[2]	1		
											1,248[3]	416		
											84,740[1]	795		
											20,350[4]	4		
											64,800[7]	81		
											3,500[14]	25	429,504	36,143
Goshen									2,001	566	90[9]	1		
											500[11]	33		
											7,740[7]	20	10,331	620
Hot Springs					3,041	1,142			50,491	811			53,532	1,953
Johnson	6,456	183	8,237	281	2,283	53			194,720	11,956	2,492[1]	8		
											500[11]			
											31,832[5]	1		
											20,000[15]	10	266,520	12,492
Laramie	851	5					553,881	1,252	65,774	19,309	500[11]	50	621,006	20,616
Lincoln					345,335	51,185	53,016	5,351	297,953	6,666			696,304	63,202
Natrona					373,168	11,695			896,849	19,148			1,270,017	30,843
Niobrara									2,901	241			2,901	241
Park					133,909	9,759			90,088	20,428			223,997	30,187
Platte			134,598	12,031					546,105	57,555	157,602[7]	156		
											400[5]	12		
											4,360,984[11]	69		
											400[13]	40		
											250[14]	71		
											10,042[15]	59	5,210,381	69,992
Sheridan	2,814	86	4,114	139	8,285	283			27,354	11,479	55[7]	2		
											27[8]	7	42,649	11,996
Sublette	74,242	619	101,365	1,864	62,160	6,248	15,973	3,678	1,318,862	30,599	33,110[2]	7	1,605,712	43,016
Sweetwater	1,003	17	796,622	40,563	229,912	330			338,934	40,299			1,366,471	81,209
Teton	12,067	150			1,046,629	4,132							1,058,696	4,282
Uinta	2,556	859	199,911	3,843	2,016	42			56,619	3,959			261,102	8,703
Washakie									5,839	7,692	66[7]	18	5,905	7,710
Weston	7,904	118							13,500	3,552	392[9]	10		
											100[13]	25	17,896	3,706
Idaho					4,998	102							4,998	102
Totals	146,537	2,353	1,423,158	64,179	2,547,865	115,348	623,005	10,713	6,082,461	402,771	10,001,518	5,588	20,824,644	600,952

[1]Splake [2]Golden [3]Grayling [4]Goldbow [5]Walleye [6]Channel Catfish [7]Largemouth Bass [8]Rock Bass [9]Black Crappie [10]Bluegill
[12]Yellow Perch [13]Gizzard Shad [14]Finescale Dace [15]Fathead Minnow [16]Kendall Warm Springs Dace [17]Northern Pike

Table 6. Record of Fish Planting (By Source) - July 1, 1981 through June 30, 1982

Station	Brook		Brown		Cutthroat		Machinaw		Rainbow		Miscellaneous		Total	
	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.
Auburn					846,964	26,875	569,854	4,930	1,530	340	26,568[1]	324	1,444,916	32,469
Boulder			160,400	3,450					1,013,402	27,135			1,173,802	30,585
Clark's Fork			466,668	22,437	278,635	34,160			631,013	69,594			1,376,316	126,191
Como Bluff	29,441	163							227,833	15,472			257,274	15,635
Daniel	88,430	1,706	88,151	903	9,758	95			299,164	8,533			485,503	11,237
Dubois	18,156	159			433,941	1,617			95,961	11,845	35,330[2]	8		
											1,248[3]	416		
											20,350[4]	4	604,986	14,049
Speas			666,389	34,324					2,282,562	112,501	4,360,984[5]	69		
											500[17]	500	7,310,435	147,394
Story	10,510	324	12,351	420	10,568	336	135	432	248,016	34,630	60,664[1]	479	342,244	36,622
Tensleep					51,280	641			303,536	14,585	5,029,456[5]	79	5,384,272	15,305
Tillett			3,699	1,370	16,951	7,215			37,707	21,217			58,357	29,802
Wigwam					263,718	4,415			906,157	79,127			1,169,875	83,542
Flume Crk.					194,432	31							194,432	31
Spearfish									35,680	7,793	1,500[2]	44	37,180	7,837
Ellis											190,100[6]	619	190,100	619
Jackson					441,112	39,710	53,016	5,351					494,128	45,061
Saratoga			25,500	1,275									25,500	1,275
Gavins Point											230,122[7]	246	230,122	246
Transplant					506	253					221[7]	46		
											27[8]	1		
											882[9]	23		
											80[10]	7		
											500[11]	0		
											6,225[12]	1,425		
											750[13]	196		
											1,000[14]	2		
											20,000[15]	10		
											13,542[16]	84	43,733	2,053
Minnesota											1,469[17]	999	1,469	999
Totals	146,537	2,352	1,423,158	64,179	2,547,865	115,348	623,005	10,713	6,082,561	402,772	10,001,518	5,581	20,824,644	600,952

[1]Splake [2]Golden [3]Grayling [4]Goldbow [5]Walleye [6]Channel Catfish [7]Largemouth Bass [8]Rock Bass [9]Black Crappie [10]Bluegill [11]Smallmouth Bass
[12]Yellow Perch [13]Gizzard Shad [14]Finescale Dace [15]Fathead Minnow [16]Kendall Warm Springs Dace [17]Northern Pike

FISCAL SUMMARY

Table 1 - Fund Balance Summary

GAME AND FISH OPERATIONS RECEIPTS

PERIOD: JULY 1, 1981 THRU JUNE 30, 1982

BEGINNING OPERATING BALANCE	$ 4,837,209.62
FY OPERATING RECEIPTS (See Table 2)	16,613,631.83
	21,450,841.45
LESS: OPERATING EXPENDITURES (See Table 3)[1]	-15,351,982.40
ENCUMBRANCES	-394,888.14
UNENCUMBERED OPERATING BALANCE JUNE 30, 1982	$ 5,703,970.91

TRUST AND AGENCY[2] HUNTING AND FISHING LICENSE APPLICATIONS FUND 04 ACCOUNT 009

Beginning Balance July 1, 1981	$ 6,388,081.00
Receipts - F.Y. 82	12,161,430.00
	$18,549,511.00
LESS: Transfers for Successful Draw	-5,823,257.00
	12,726,254.00
Unsuccessful Draw (Refund Warrants)	-4,836,978.00
Ending Balance June 30, 1982	$ 7,889,276.00

DEDICATED FUNDS[3]

DEDICATED FUNDS SUMMARY

	Current Year	Past Year
Beginning FY Balance	$ 1,198,524.08	$ 671,094.79
Receipts FY[1]	671,172.43	863,138.04
LESS: Expenditures, Transfers, Refunds, Deductions[1]	-649,312.06	-335,708.75
Ending Balance-Dedicated Funds Accounts	$ 1,220,384.45	$ 1,198,524.08

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[1] Although budgeted and expended from an operating account (006) in FY 82, landowner coupons expenditures are disclosed on the statement under a "Dedicated Account," as they should be. The FY 83 budget structure has been revised to properly reflect this accounting philosophy.

[2] The Trust and Agency License Account acts as a holding account for the Single License Draw System. Upon final completion of the drawing system and refund to unsuccessful applicants, the balance in this account, representing the license revenue of successful applicants, is transferred to the Game and Fish Operating Account.

[3] Dedicated Fund Accounts are those accounts that are not used in daily operations and require special action in order to initiate expenditures. These accounts are generally reserve in nature or are established to comply with legislative requirements or are accounts necessitated by legal agreements.

Table 1 - Fund Balance Summary (continued)

TRUST AND AGENCY - GIFTS AND DONATIONS - FUND 04 ACCOUNT 010

Beginning Balance July 1, 1981	$ 74,941.68
Receipts - F.Y. 82	9,379.83
Expenditures - F.Y. 82	.00
Ending Balance June 30, 1982	$ 84,321.51

RESERVE FOR REPLACEMENT OF CAPITAL IMPROVEMENT - FUND 08 ACCOUNT 007

Beginning Balance July 1, 1981	$ 419,574.70
Receipts - F.Y. 82	45,427.42
Expenditures - F.Y. 82	.00
Ending Cash Balance June 30, 1982	$ 465,002.12

BASIN ELECTRIC MITIGATION FUND - FUND 08 ACCOUNT 012

Beginning Balance July 1, 1981	$ 166,643.96
Receipts - F.Y. 82	23,582.91
Expenditures - F.Y. 82	-6,631.05
Ending Cash Balance June 30, 1982	$ 183,595.82

NONRESIDENT APPLICATION FEE/DAMAGE CLAIM/LANDOWNER COUPONS
FUND 08 ACCOUNT 098

Beginning Balance July 1, 1981	$ 537,363.74	
Receipts - F.Y. 82[1]	*587,477.91	(1)
Expenditures - F.Y. 81	-642,681.01	(2)
Ending Balance June 30, 1982	$ 482,160.64	

LAW ENFORCEMENT RETIREMENT REFUND - FUND 08 ACCOUNT 099

Beginning Balance July 1, 1981	$ .00
Receipts - F.Y. 82	5,304.36
Expenditures - F.Y. 82	.00
Ending Balance June 30, 1982	$ 5,304.36

(1) Receipts: $549,952.00 Landowner Coupon Funding; $29,448.12 Interest; $8,077.79 Application Fees

(2) Expenditures: $549,952.00 Landowner Coupons; $92,729.01 Damage Claims

*Receipts for this dedicated account are derived from a fiscal transfer from the operating accounts, therefore, the $587,477.91 is part of the operating balance shown on page 63.

Table 2 - Receipts

JULY 1, 1981 THRU JUNE 30, 1982

RECEIPTS:	
Hunting & Fishing Licenses	$12,152,723.35
WYOMING WILDLIFE & Publications	195,947.84
Watercraft Certificates	87,937.00
Rent From Department Dwellings	70,552.50
Interest from State Treasurer	876,678.60
Interest from Investments	363,834.04
Refund - Prior Year	31,940.80
Refund - Current Year	22,650.49
100% Reimbursable Projects	295,802.81
Real Estate Sales	.00
Nonresident Big Game App. Fees	402,942.21
Returned Items (NSF Checks)	1,633.21
Office Receipts	11,277.97
Income From Land	330,092.22
GRANT-IN-AID:	
Pittman-Robertson Projects	783,186.24
Dingell-Johnson Projects	353,807.03
Commercial Fisheries - R & D	25,000.00
Cooperative - U.S.F.S.	58,780.36
Cooperative - Bur. of Reclamation	378,642.11
Grazing Leases - Fed. Aid Part	72,643.39
Share Cropping - Fed. Aid Part	97,559.66
	$16,613,631.83

Table 3

Expenditures from Operating Accounts

PERIOD: JULY 1, 1981 THRU JUNE 30, 1982

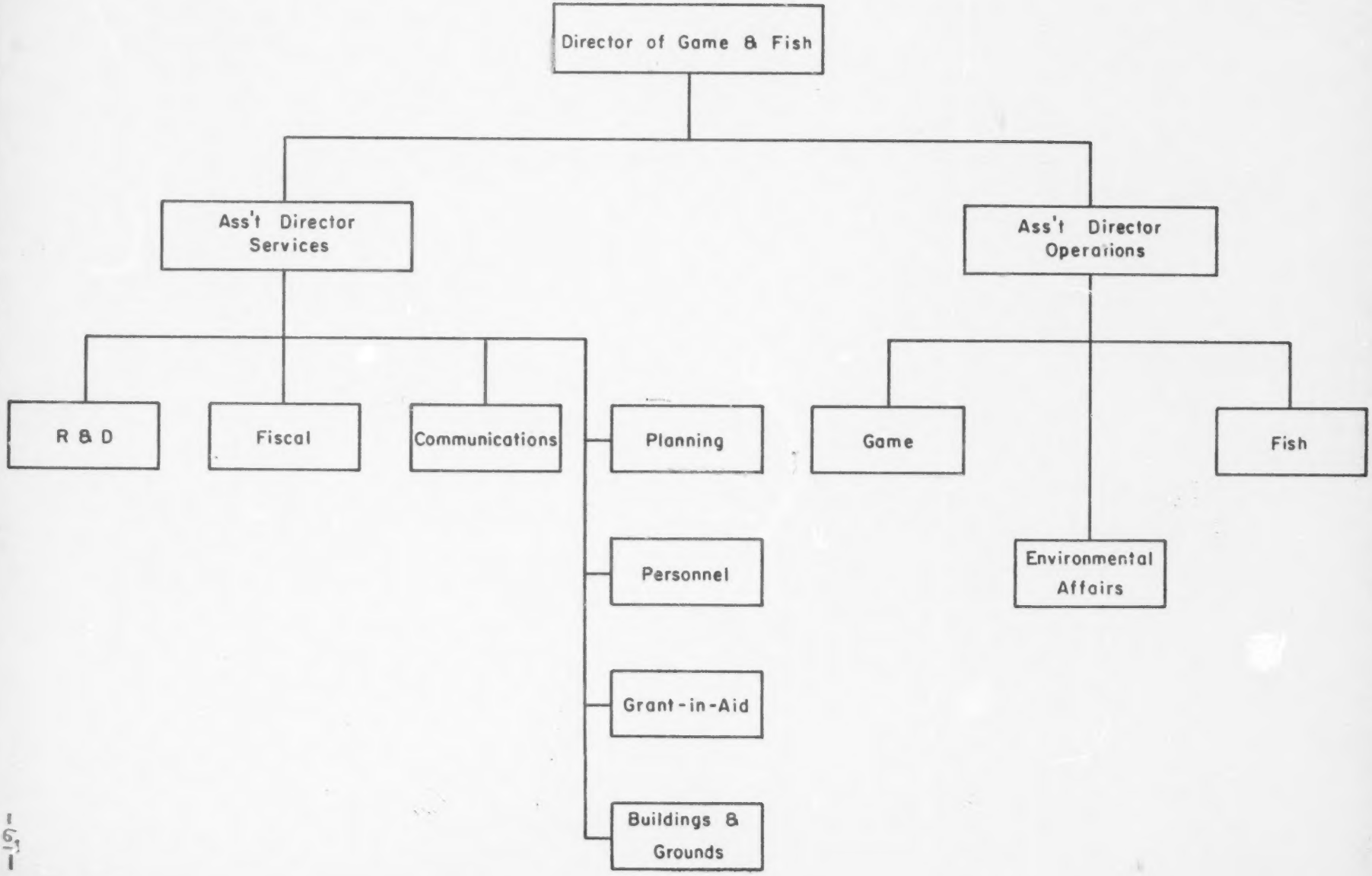
	ADMINISTRATION	FISCAL DIVISION	COMMUNICATIONS DIVISION	R & D DIVISION	FISH DIVISION	GAME DIVISION	TOTAL	PERCENTAGE
Personal Services	$ 878,915.42	$ 558,467.91	$- 529,566.50	$1,375,659.96	$ 2,655,086.24	$ 3,679,963.01	$ 9,677,659.04	63.7
Supportive Services	358,913.13	1,012,953.37	288,092.11	588,639.72	925,927.92	1,405,050.28	4,579,576.53	29.6
Restrictive Services	37,291.08	97,855.31	21,272.89	800.00	10,037.87	25,919.65	193,176.80	1.2
Grant-In-Aid Payments	177.00	.00	.00	.00	.00	50,000.00	50,177.00	.3
Capital Expenditures	37,906.67	.00	.00	5,408.78	.00	20,000.00	63,315.45	.3
Non-Operating Expenditures	.00	136.00	263,607.70	.00	.00	3,500.00	267,243.70	1.7
Special Services	299,212.53	.00	16,873.95	15,324.00	41,916.58	147,506.82	520,833.88	3.2
TOTAL	$1,612,415.83	$1,669,412.59	$1,119,413.15	$1,985,832.46	$ 3,632,968.61	$ 5,331,939.76	$15,351,982.40	100.0

Expenditures of Dedicated Accounts by Fiscal Year:

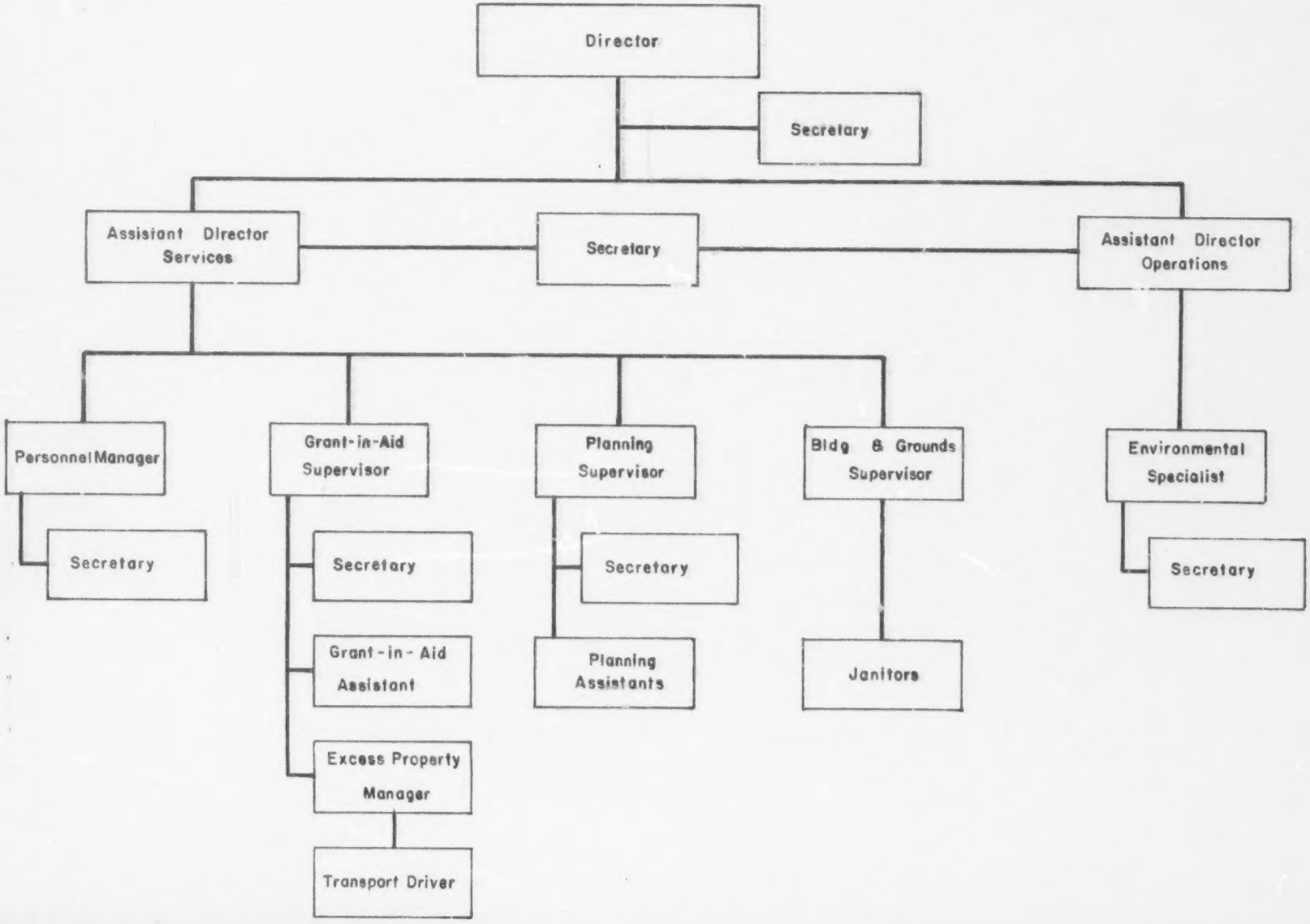
	1979	1980	1981	1982
Damage Claims.....	$ 71,400	$110,174	$ 128,589	$ 92,729.01
Landowner Coupons.....	343,015	276,340	445,512	549,952.00
SUBTOTAL.....	$414,415	$386,514	$ 574,101	$ 642,681.01

Other Dedicated Accounts:

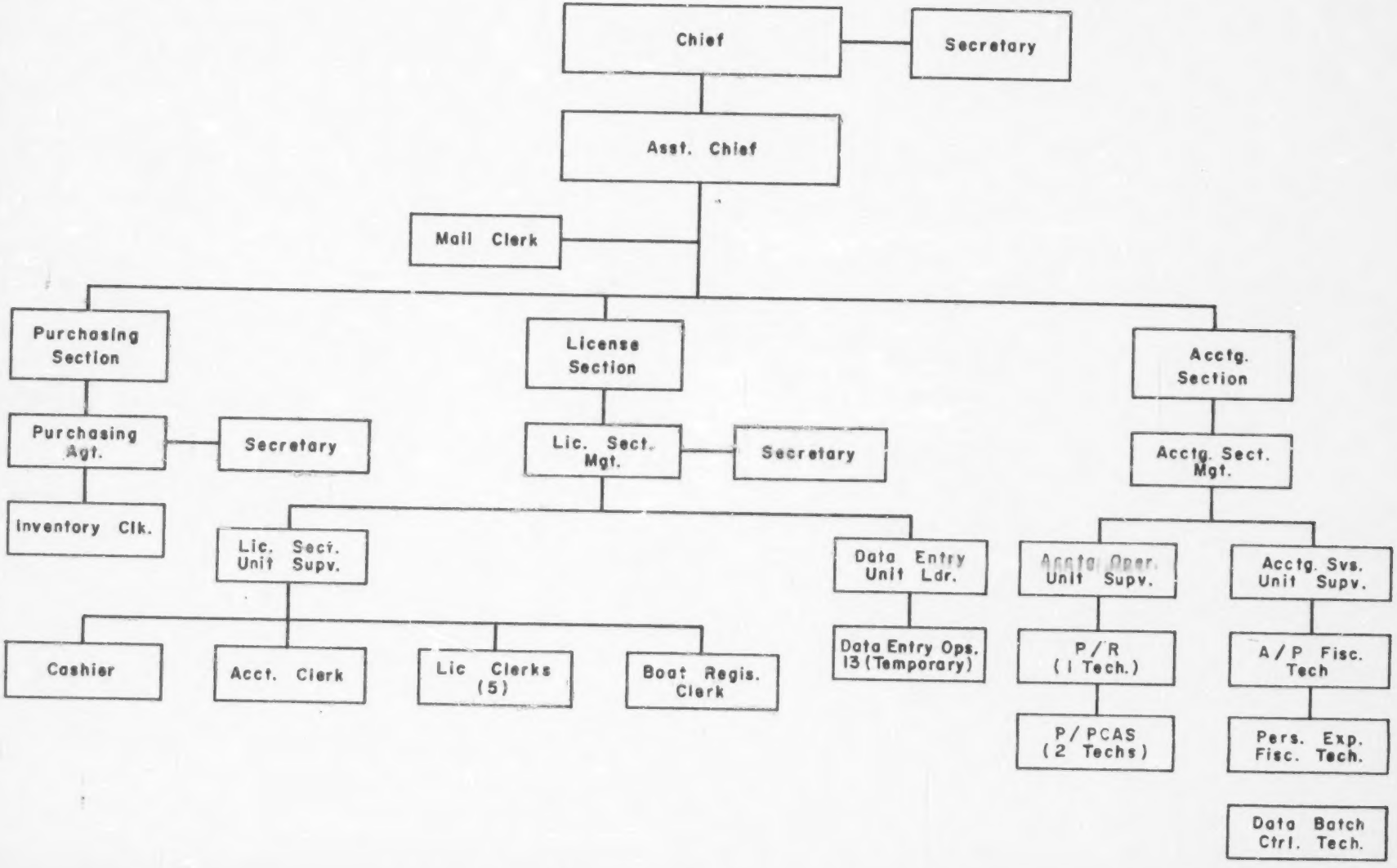
Mitigation Expense----------	----------	6,631.05	
TOTAL DEDICATED ACCOUNT EXPENDITURES----------	----------		649,312.06
TOTAL AGENCY EXPENDITURE FOR FY 82----------	----------		$16,001,294.46


Director of Game & Fish
Ass't Director Services
Ass't Director Operations
R & D
Fiscal
Communications
Planning
Personnel
Grant-in-Aid
Buildings & Grounds
Game
Fish
Environmental Affairs

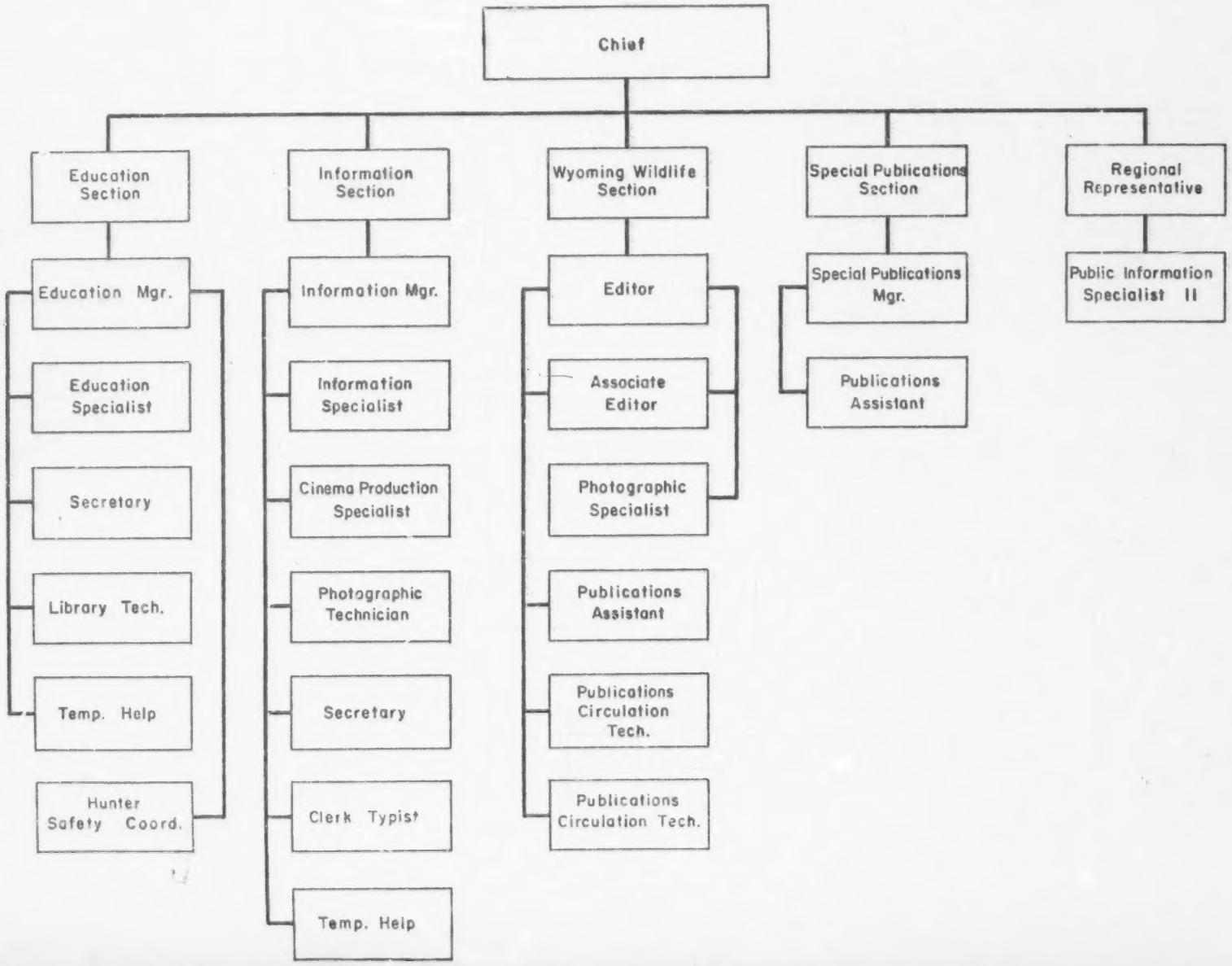
ADMINISTRATIVE SECTION



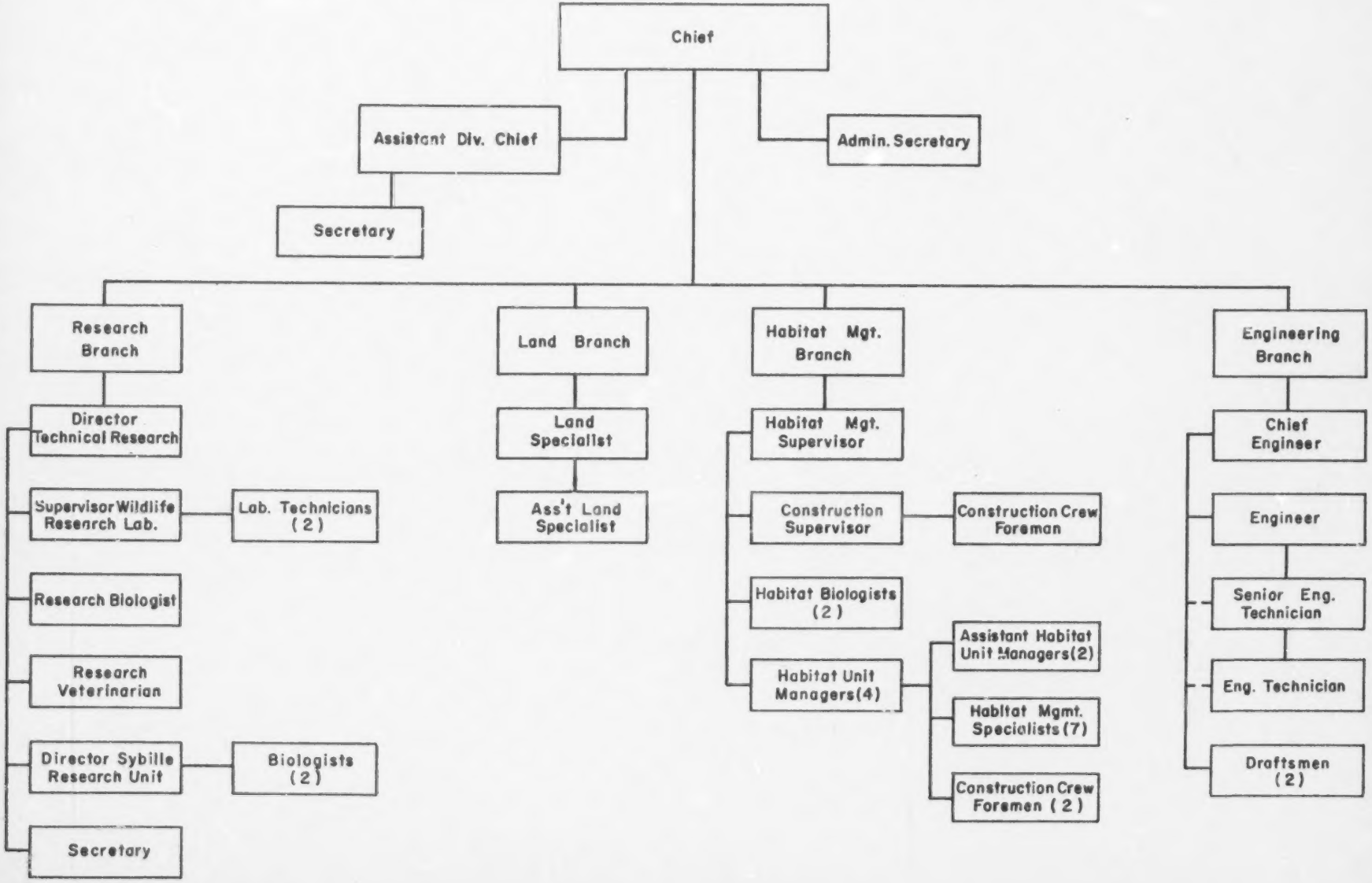
FISCAL

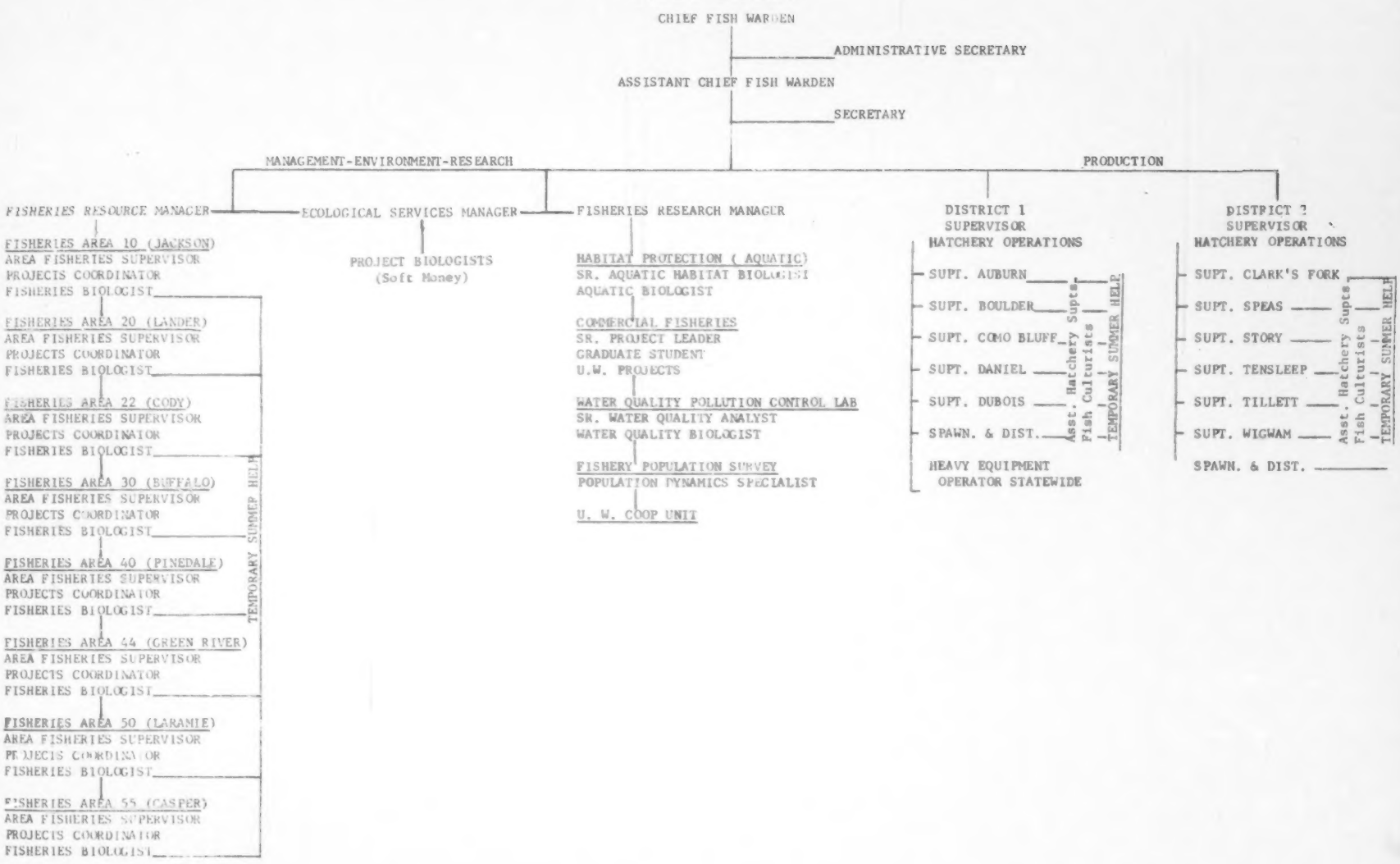

Chief
Secretary
Asst. Chief
Mail Clerk
Purchasing Section
License Section
Acctg. Section
Purchasing Agt.
Secretary
Lic. Sect. Mgt.
Secretary
Acctg. Sect. Mgt.
Inventory Clk.
Lic. Sect. Unit Supv.
Data Entry Unit Ldr.
Acctg. Oper. Unit Supv.
Acctg. Svs. Unit Supv.
Cashier
Acct. Clerk
Lic Clerks (5)
Boat Regis. Clerk
Data Entry Ops. 13 (Temporary)
P/R (1 Tech.)
A/P Fisc. Tech
P/PCAS (2 Techs)
Pers. Exp. Fisc. Tech.
Data Batch Ctrl. Tech.

COMMUNICATIONS DIVISION



RESEARCH AND DEVELOPMENT DIVISION




FISH DIVISION
CHIEF FISH WARDEN
ADMINISTRATIVE SECRETARY
ASSISTANT CHIEF FISH WARDEN
SECRETARY
MANAGEMENT-ENVIRONMENT-RESEARCH
PRODUCTION
FISHERIES RESOURCE MANAGER
ECOLOGICAL SERVICES MANAGER
FISHERIES RESEARCH MANAGER
DISTRICT 1 SUPERVISOR HATCHERY OPERATIONS
DISTRICT 2 SUPERVISOR HATCHERY OPERATIONS
FISHERIES AREA 10 (JACKSON)
AREA FISHERIES SUPERVISOR
PROJECTS COORDINATOR
FISHERIES BIOLOGIST
FISHERIES AREA 20 (LANDER)
AREA FISHERIES SUPERVISOR
PROJECTS COORDINATOR
FISHERIES BIOLOGIST
FISHERIES AREA 22 (CODY)
AREA FISHERIES SUPERVISOR
PROJECTS COORDINATOR
FISHERIES BIOLOGIST
FISHERIES AREA 30 (BUFFALO)
AREA FISHERIES SUPERVISOR
PROJECTS COORDINATOR
FISHERIES BIOLOGIST
FISHERIES AREA 40 (PINEDALE)
AREA FISHERIES SUPERVISOR
PROJECTS COORDINATOR
FISHERIES BIOLOGIST
FISHERIES AREA 44 (GREEN RIVER)
AREA FISHERIES SUPERVISOR
PROJECTS COORDINATOR
FISHERIES BIOLOGIST
FISHERIES AREA 50 (LARAMIE)
AREA FISHERIES SUPERVISOR
PROJECTS COORDINATOR
FISHERIES BIOLOGIST
FISHERIES AREA 55 (CASPER)
AREA FISHERIES SUPERVISOR
PROJECTS COORDINATOR
FISHERIES BIOLOGIST
TEMPORARY SUMMER HELP
PROJECT BIOLOGISTS
(Soft Money)
HABITAT PROTECTION (AQUATIC)
SR. AQUATIC HABITAT BIOLOGIST
AQUATIC BIOLOGIST
COMMERCIAL FISHERIES
SR. PROJECT LEADER
GRADUATE STUDENT
U.W. PROJECTS
WATER QUALITY POLLUTION CONTROL LAB
SR. WATER QUALITY ANALYST
WATER QUALITY BIOLOGIST
FISHERY POPULATION SURVEY
POPULATION DYNAMICS SPECIALIST
U. W. COOP UNIT
SUPT. AUBURN
SUPT. BOULDER
SUPT. COMO BLUFF
SUPT. DANIEL
SUPT. DUBOIS
SPAWN. & DIST.
HEAVY EQUIPMENT OPERATOR STATEWIDE
Asst. Hatchery Supts
Fish Culturists
TEMPORARY SUMMER HELP
SUPT. CLARK'S FORK
SUPT. SPEAS
SUPT. STORY
SUPT. TENSLEEP
SUPT. TILLETT
SUPT. WIGWAM
SPAWN. & DIST.
Asst. Hatchery Supts
Fish Culturists
TEMPORARY SUMMER HELP

TERRESTRIAL WILDLIFE DIVISION